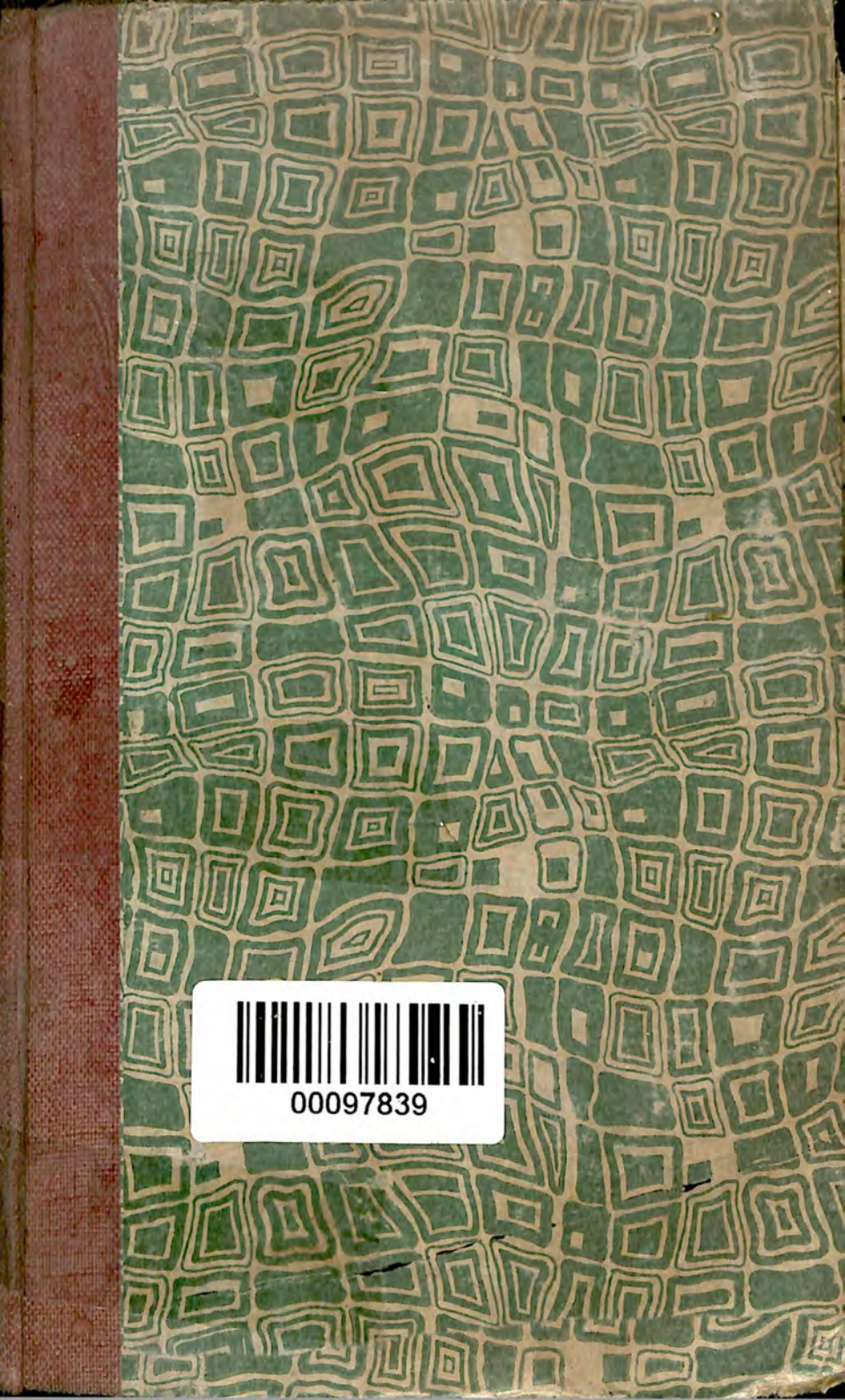
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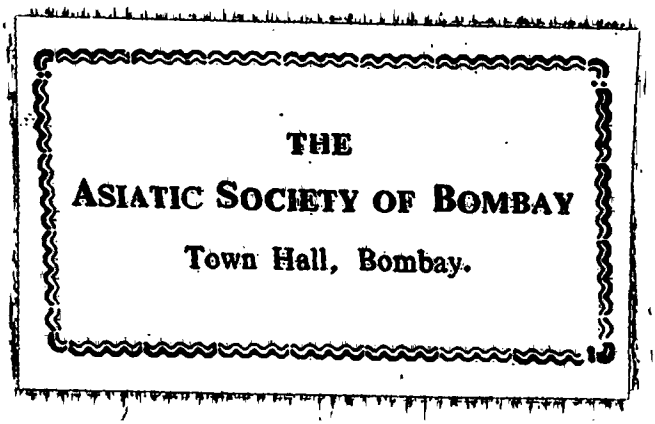

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AN ACCOUNT

OF THE

IMPROVEMENTS ON THE ESTATES

OF THE

Marquess of Stafford,

IN THE COUNTIES OF

STAFFORD AND SALOP,

AND ON THE ESTATE OF

SUTHERLAND.

WITH REMARKS.

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By JAMES LOCH, Esquire.

LONDON:

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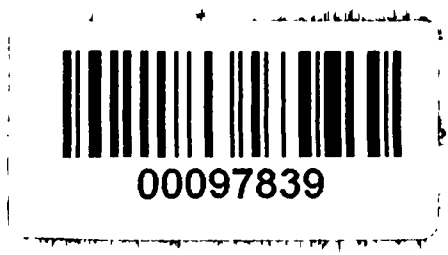

TO THE

MARQUESS OF STAFFORD, K. G.

My Lord,

In publishing the following statement, I am, on every account, naturally led to address it to Your Lordship.

It was with considerable hesitation that I came to the resolution of intruding on publick notice that which might appear to many to be of a mere private and local nature. This hesitation was greatly increased, from my being well aware how much Your Lordship was averse to any thing being stated that had the slightest appearance of giving an ostentatious account of what had been done for the amelioration of your estates, and the districts in which they are situated. This reluctance was only overcome at the suggestion of many eminent

individuals and friends, and from the feeling that it was incumbent on me to give some account of the nature and progress of those measures, (now that they are completed,) which Your Lordship and Lady Stafford had adopted for the improvement of the estate of Sutherland, in order to contradict, in the most positive and direct manner, the unfounded and unwarrantable statements; or, perhaps, I shall be more correct if I were to say, the artful perversions of the truth which have been circulated in regard to this subject; — statements which were not more calumnious to Your Lordship and to the respectable gentlemen and other individuals who occupy that estate, than unjust to the people themselves, whose orderly conduct and excellent behaviour cannot be too highly commended, and which approbation is particularly due to those whose removals have been carried into effect in the month of May; in spite of all that was done during the course of the last

year to inflame their passions, and mislead their judgments.

Connected, as I have been, with these measures, from its having fallen to my lot to collect and arrange the information upon which Your Lordship and Lady Stafford had to decide, the responsibility must rest with me, as to how far that trust has been well or ill performed. Equally was I bound to see that the individuals who were employed in the immediate management of these affairs were fit to execute that which was committed to their charge; and in settling the details, to guard against the chance of any thing being done derogatory to Your Lordship's and Lady Stafford's rank and character, or detrimental to the interests of the people.

Having come to the determination of giving such a statement to the publick, it appeared to me that I was called upon, at the same time, to show the extent and nature of the improvements which have

been executed on Your Lordship's English estates; followed out, as they have been, by as respectable and improving a tenantry as any in England; and whose skill and industry, though little boasted of, are not on that account the less fit for imitation.

This I did the more readily, as it appeared to be not only curious, but important, to explain, by what singular coincidence, it has happened that Your Lordship should have had to carry into effect, at the same moment, similar arrangements in both parts of the kingdom; the more so, as by discussing the principles on which these arrangements were founded, the subject obtained more of a general and publick character.

Before I conclude, I ought to take this opportunity of explaining further, that if, in the following pages, any conclusion shall have been drawn which the premises do not appear to warrant; or if, by accident, any inaccuracy in the statement may have crept in, I alone am answerable for them; as

well as for such opinions as I have ventured to enforce, and endeavoured to illustrate: and of adding, that it will ever be a source of the most sincere gratification to myself, to recollect that I should have been, by Your Lordship's confidence, thus intimately connected with measures which have already bestowed, and must continue to confer, on so large a portion of my fellow-creatures, as much additional happiness and comfort as the improvements adopted by Your Lordship and Lady Stafford are calculated to do.

I have the honour to be,
With the greatest truth,
And the most sincere regard,
Your Lordship's
Very faithful
Humble Servant,
JAMES LOCH.

106. Great Russell-Street,
Bloomsbury.
June 1st, 1820.

ERRATA.

Page 102. line 8. from bottom, insert *and* after *shire*.
Page 117. line 13. for *occupations* read *occupation*.
Page 129. line 7. for 20,000 read 20,060.
Page 133. line 4. for *Amadale* read *Armadale*.
Page 181. line 2. from bottom, for *in* read *on*.
Page 183. line 10. from bottom, for *which* read *whom*.
Appendix, page [41] line 7. for *Scberscross* read *Sciberscross*.

PREFACE.

In the preceding address, and in the following pages, the reasons which have led to the present publication are sufficiently set forth. The same reasons will explain why that which may appear to some to be the natural order of the subject, has been departed from, by commencing with the account of the arrangements which have been adopted in the county of Sutherland.

It may be proper to notice, that in the following pages, the consideration of the more general questions, as to the propriety of the policy of permitting or encouraging emigration, and of converting small occupations into large farms, with the consequent effects of accumulating a large portion of the population of the country into villages and large towns, has in some degree been taken for granted, as matters upon which the publick mind seems to be in a great measure made up; at least as far as the prac-

tice of the whole nation can be supposed to be a proof of their acquiescence in the truth of these once strongly contested points. At the same time, it is true, that it is too much the case in all questions of political economy, to agree without hesitation to the truth of every general principle, but immediately to set up so many exceptions to the rule, as utterly to destroy the effect of this gratuitous admission.*

In the following pages, however, the truth of those general principles being taken for granted, it will be shown, that they apply as well to Lord Stafford's English estates, and to the county, or rather to the estate of Sutherland, as they do to the rest of the kingdom.

In doing this, it will be pointed out, how it should have happened that these estates

* It is universally conceded, that it is from large farms alone, that a surplus produce can be obtained for the maintenance of our artisans and manufacturers. It is conceived, that there is as little doubt that such an arrangement also, rather increases than diminishes the agricultural population of the country. Nor can there be much hesitation in admitting that a sober, well-doing farm labourer, feels less want, and experiences fewer hardships than the poorest class of tenants, formerly the occupiers of the soil of England.

should only now be undergoing that change, which began to operate in England, as far back as the reign of Henry VII. A change arising in some degree out of the peculiar policy of that prince's reign, for depressing the greater barons, and for fostering and raising up the next class of the community; which he was enabled the more easily to accomplish, in consequence of the destruction of many, and the ruin of most of the more powerful baronial families, during the struggles of the rival houses of York and Lancaster. The increase and diffusion of wealth, and of the commercial and agricultural prosperity of the nation, produced the necessary enlargement of the towns, along with an additional demand for labour, and for the surplus produce of land. The consolidation of farms, and the inclosure of commons necessarily followed this demand, and the country made its first step in that unrivalled career of improvement, which has ever since attended its progress. The statesmen of that day, as some still do, mistook the cause of this rapid change, and, dreading its effects, endeavoured, though in vain, to check its progress, by passing a statute, being the 4th Hen. VII. cap. 19, intituled, "the pe-

" nalty for decaying of houses of husbandry,
" and not laying of convenient land, for the
" maintenance of the same," and by which it was enacted, " That all houses of hus-
" bandry that were used with twenty acres
" of ground, and upwards, should be main-
" tained and kept up for ever, together
" with a competent proportion of land to
" be used and occupied with them." This statute has received the most unqualified approbation of Lord Bacon. But like other laws which are contrary to the natural course of human affairs, and in opposition to the principles by which society is regulated and held together, it failed in producing the effect intended. It was exacted but to be disregarded. The country continuing steady in that course which this law was meant to check. In the ensuing reign the change became more rapid, and the King endeavoured in the year 1521, to stop its progress, by directing his commissions to the magistrates, for putting the laws against inclosures in execution. This however was attended with as little effect as every former attempt, having the same end in view. In the year 1549, the inclosure of commons, and the conversion of tillage land into pas-

ture, created so much uneasiness among certain classes of the people, that King Edward VI. endeavoured to interfere, and to check the evil complained of, by means of a proclamation, desiring that all late inclosures might be laid open. The impatience of the people, however, prevented them waiting to see the effect of this measure, and they assembled in great numbers in Norfolk, headed, as is well known, by Ket, a tanner, and being joined by many persons from Suffolk, committed the most grievous outrages. This spirit rapidly extended itself into Kent, Essex, Buckingham, Northampton, Somerset, and Leicester. Such was the power and the numbers of these misguided people, that it required six thousand men, under the Earl of Warwick, to put them down, which he did not accomplish, until they lost two thousand of their numbers in a regular battle.

It is unnecessary to follow the history of these events any further, except to remark, that the same natural course of things was again attempted to be set aside, by the 39th Eliz. cap. 2. which is intituled, "An "Act that arable land made pasture since "4 Eliz. shall be again converted to tillage,

" and what is arable shall not be converted " to pasture, &c." This act appears to have been attended with much the same effect, as another statute of this sovereign, enacted to prevent the enlargement of London.

The outrages of the people, and their open defiance of the laws, in regard to these measures continued to a much later period.

The arrangement of the northern counties was naturally suspended, as long as the island obeyed two monarchs, but during the period which elapsed between the union of the crowns, and that of the kingdoms, the same system was essentially carried into effect in the border districts of both countries, except that the land thus freed of people, was applied to the rearing of sheep, and not to the cultivation of grain. The attachment to the Stuart family, and the hereditary jurisdictions still maintained in full force the former arrangement of society, peculiar to the Highlands of Scotland. But the discomfiture of the adherents of the Pretender, and his own defeat in 1746, with the abolition of the heritable jurisdictions in 1747, having brought the Highland chieftains within the pale of the law, and placed them on the same footing as the other gentlemen of the land, they began rapidly to

acquire the same tastes,—to be occupied with the same pursuits,—to feel the same desires,—and to have the same wants as their brethren in the south. In order however to indulge these propensities, and to be able to appear in the capital with due effect, it was necessary that they should convert their estates to that mode of occupation most suited to their circumstances, and from which they could derive the greatest income. Luckily in this, as in every other instance in political economy, the interest of the individual, and the prosperity of the state went hand in hand. And the demand for the raw material of wool by the English manufacturers, enabled the Highland proprietor to let his lands for quadruple the amount they ever before produced to him. These arrangements continued to be carried into effect from time to time, in the southern and central highlands, up to about the commencement of the French revolution war; not always however without serious resistance on the part of the people.

The demand for soldiers, after the commencement of the war, to recruit fencible regiments, for a time influenced the progress of these changes, but as the supply of men became more equal to the demand,

and as the Highlanders have never enlisted cheerfully by the ordinary means of recruiting, these arrangements never ceased altogether to be acted upon.

The northern highlands still remained to undergo that change which the rest of the island had already adopted. In this district it naturally began to be followed in the counties situated nearest to those into which it had already been introduced. In Ross-shire, accordingly it was undertaken on a great scale in 1792. The dissatisfaction produced was so great, that the most serious affrays took place, and the military had to act, and blood was shed before quiet was restored.

Between that time and about four years back, the greater portion of the county of Sutherland, not belonging to Lord and Lady Stafford, was arranged according to those plans, so universally adopted. Why this ancient condition of society should have prevailed longer on the estate of Sutherland, than in any other part of the island; and why, the proprietors of this estate, notwithstanding they have afforded the people advantages which no other owner ever gave the people they moved, should have been the object of animadversion, while

others have passed without notice, it is the object of the following pages to explain.

P. S. — It has been stated in page 112, that the removal of the people belonging to the estate of Gruids, in the county of Sutherland, had been completed during the course of the month of May. In order to be accurate, it is proper to mention, and it is done with much regret, that information has been received, that some of the people have very improperly resisted the execution of the summons of removal, and that the sheriff's officer, who attempted to serve it, was treated in the most barbarous manner. In this respect, they have been far from following the praise-worthy example of their neighbours, on the estate of Sutherland, whose good behaviour cannot be too highly praised. As it has been stated that these people had no lots to retire to, Lord and Lady Stafford have authorised Mr. Suther, (their factor,) to inform the agents of the proprietor of that estate, that if it would be any accommodation to him, lots on the Dornoch Muirs, part of the estate of Sutherland may be had by such of the people, as have not offended against the law.

It will be seen from the text, that the *immediate* cause of these people being moved, *proceeds* from this farm having been let two years ago to a tacksman, intimately connected with some of those individuals, and related to others, who assumed the title of The Sutherland and Transatlantick Association, from which society proceeded those gross misrepresentations, regarding the estate of Sutherland, which were so industriously thrust upon public notice, during the course of last year, and who, from their own accounts, bore an active share in some of their proceedings. The estate of Gruids, is in every way most suitable for a sheep farm. But it must no doubt appear singular to every unprejudiced person, that the arrangements on the estate of Sutherland should

have been selected, by this self-named society, for animadversion, while others, in which they are so much more deeply interested, should never have been alluded to. There has been always much apparent reason for concluding, that one object which these individuals, (stimulated by the motives hereafter mentioned,) had in view was by raising a feeling against the plans pursued for the improvement of the estate of Sutherland, to endeavour to reduce them to a level with their own proceedings, in order that the latter might pass without observation, and that in this way, their own insignificance might escape, under the shelter of the name of the proprietors of this domain. It is needless to remark, that these observations are applicable only to the individuals of that society, its agents, and abettors.

For the sake of accuracy, it is also necessary to mention that eighteen families have left the Barony of Assynt this season. Eight of these, deceived by the delusions of the Transatlantick Association, entered sometime ago into an agreement with the master of a vessel, who insisted on its being fulfilled, notwithstanding their wish to remain and settle on the lots they had at first refused. The other ten families had long been established fishermen on the coast, but having attached themselves to the doctrines of a fanatical blacksmith, they followed him to the other side of the Atlantick — the only schism which ever occurred in Sutherland — a fact which reflects no small credit on the worthy and zealous persons who compose that presbytery, and who, by the diligent exercise of their pastoral duties, do honour to the church of which they are members.

It has been omitted to be stated, in its proper place, that about twenty houses have been built on the coast by the proprietors, for aged widows, who had it not in their power to do so themselves.

July 10th, 1820.

ACCOUNT

OF

IMPROVEMENTS, &c.

In the year 1815, a short account of the Estate of Sutherland was drawn up and printed, for the purpose of exhibiting, as concisely as possible, the former condition of the district of the island of which this estate forms so large and important a part; with a statement of the improvements which had lately been introduced into it.

The inducement for doing so, was the desire felt by many, to learn the nature and extent of those changes which had been then carried into effect, and were still projected; and which had been, from interested or worse motives, grossly misrepresented.

The importance of the subject itself, as well as the discussions which the consider-

ation of the improvements of the highlands of Scotland have at all times occasioned, increased this desire. Nor is it to be wondered at, that the country should take a deep interest in the fate of those men, whose merits have ever been most conspicuous, from the period, when the services of the Highland regiments were rendered available to the nation, through the wisdom of Lord Chatham. These feelings were much heightened, by the deep regret, felt and openly expressed by almost every Highland gentleman, at the loss of those manners and customs, which early associations and traditional accounts rendered dear to their best sympathies and affections; though such regret however, it must be admitted, has been always felt and expressed more strongly, by those who had themselves long abandoned their paternal homes and national habits, than by those who continued to reside among their native hills. With the former, it was a pure and unmixed matter of feeling; while the latter, both from personal and other motives, were inclined to take a more accurate and correct view of the subject, and to submit to those changes which

the altered state of the country at large required. The gradual operation of circumstances produced similar effects on them, as on the rest of the community, and their judgments became liberated from an overweening attachment to early habits and recollections. But to those who had long quitted the country, or whose pursuits were turned to other objects, but above all, to those who did not depend for their support on the rents of a highland estate, the necessity of such a change never occurred. The seducing, but fanciful colours in which they had painted to themselves the happiness of their native glens, and the simple, yet daring, the virtuous, yet irregular manners of their ancestors, made them overlook all that was real and true; so that they could not be easily brought to acknowledge the existence or the influence of those causes, as they affected the highlands, from the operation of which, no part of the country was exempted. The consequence has been, that the propriety of the arrangements, which have been from time to time adopted, for the management of highland property, have never been judged of, ac-

cording to their real merits; and it has therefore happened, that, during the last half century, as these alterations have been gradually going on, the same expressions of strong feeling have been occasionally uttered, without any attempt being made to understand the nature of the measures, so strongly characterised and observed upon. In no instance, however, has this occurred, to the same extent, as in the case now more particularly under consideration. Indeed, so strong has the prejudice, with regard to it, been permitted to go, that it is believed that there may be found among those who disapprove of the late alterations in SUTHERLAND, many, who have long enjoyed the benefits of the system they now condemn; but who never, in their own case, have contemplated to restore that state of things, the abolition of which they lament.

In the minds of the people of England, moreover, the history of the Highlands of Scotland has obtained an interest, beyond what its distance and relative importance in the general scale of the empire would otherwise have secured to it, in consequence of its having been the last resort of at-

tachment to the Stuart family. Combined with this, there exists a degree of romantick feeling, connected with this district, from its being during the course of the late war, the only place which an English traveller could visit safely, and gratify his laudable curiosity, by contemplating scenes and people, differing in language, customs, and in every other material circumstance, from that which he was in the daily habit of beholding. This interest has been lately revived and extended in a considerable degree, by those works whose powerful influence is as universal as the language in which they are written. Such being the case, the effect has been, that every thing that tends to alter the condition and manners of the people, has become a matter of regret, however much those who experience this feeling are convinced in their judgment, that such a change is both for the advantage of the individual, and the general prosperity of that particular district of the country.

Since the date of the statement already mentioned, the plans of improvement there-

in described have been steadily adhered to, and their rapid and successful progress, and the increased and increasing industry and comfort of the people, have justified the most sanguine views which were then taken of them. So decided, indeed, has this progress been, and so much superior has the new system shown itself to be, in every point of view; especially in the manner in which it has influenced the habits of the people; that some parts of the arrangements have been executed to a greater extent than it was possible to contemplate at their commencement. This experiment, for so no doubt it was to a certain extent, was one of much anxiety. The greatest deliberation was demanded, previous to its being carried into effect: and no person could think lightly upon a subject, where the happiness and comforts of so many of his fellow-creatures were so deeply concerned. The Southern Highlands, where similar arrangements had been long adopted, presented indeed a favourable result; but the peculiar local circumstances of the more Northern districts, introduced many distinctions to which

it was both important to attend, and necessary to provide for. How these might operate on, and affect the general system, remained still to be seen. It is most satisfactory therefore, to find the reasoning, on which these improvements and arrangements were adopted, has been borne out as completely in the case of the estate of SUTHERLAND, as it had before been in the other instances.

These arrangements have been brought nearly to a close, during the course of this season. That which remains to be done is upon the most limited scale, when compared with that which has actually been effected. Besides, from the duration of the tacks which have been granted by Lord and Lady STAFFORD, their final completion must be postponed until the year 1828. A fit opportunity, therefore, seems to present itself, for giving a more particular account of the former condition of this estate, than has yet been presented to the publick, for the purpose of exhibiting the very wretched and deplorable situation of its inhabitants, under that state of things, and of pointing out in what manner, and

to what pitch it has been raised from that condition, in the short space of twelve years; giving, at the same time, some details of the plan, which has been laid down for the amelioration of this vast property, and its population; and of the success which has attended its progress, and justifies its adoption.

The choice also of this particular moment for giving such an account, affords an opportunity of pointing out exactly what has been done, and still remains to be executed, which will form, it is hoped, an interesting subject for contemplation hereafter, fixing, as it will do, with precision, the very point from which these improvements commenced, and the steps by which the whole alteration has been accomplished; for the purpose of ascertaining how far, in the future progress and prosperity of the country at large, the improvement of this district shall have followed the course which has been conceived, and in some degree chalked out for it.

There is one other and important object besides those already stated, which it is conceived the publication of such an account must and will effect; which is, the

removal of those impressions, if any such yet exist, which may have been produced by those malicious and false statements and insinuations, that were at one period circulated with much industry, through the medium of the publick press. Statements which created much surprise in SUTHERLAND and to all acquainted with the country, and which could only make an impression on those whose distance made them ignorant of the real facts, and who never could imagine that feelings arising from the sense of benefits received, feelings dictated by disappointed expectations, or even feelings founded in resentment for requests not complied with, and which were expected to be enforced by substituting publick abuse for private solicitation, should have been the foundation of such vile and scandalous misrepresentations. By Lord and Lady Stafford, who were thus so unjustly made the objects of attack, and by those who were honoured with their confidence and to whom the execution of these arrangements were committed, these mis-statements were met with the contempt they deserved. convinced of the propriety of the line of

conduct they were pursuing, and confident, at the same time, that these intentions were carried into effect with every regard to the feelings, the interest, and even the PREJUDICES of the people, they waited without anxiety for the result, as they well knew that in a short time the truth would prevail, and that the real character of the measures they were pursuing, would be then fully felt, and properly estimated. But they could not fail to regret, that by the active circulation of the most unfounded and ridiculous stories of relief and countenance to be afforded by noblemen of the highest rank in the kingdom*, persons un-

* Such is the extreme ignorance and credulity of these poor people, the necessary consequence of the state they have hitherto been brought up in, that a considerable number of them were induced to attend a meeting at the Mickle Ferry, called by persons strangers to them and to the county, in the confident expectation that money was to be distributed to them, by a Scotch nobleman of the highest rank, who they were induced to believe was to preside at the meeting; many of them walked 60 miles to do so, losing at least three days labour; besides being called upon to pay a shilling or sixpence each upon signing a petition to the Prince Regent, which their ignorance of English, and their being unable to read in any language, prevented them from knowing the con-

connected with the county should, through the instrumentality of some of the discharged men from the 93d or SUTHERLAND regiment, have succeeded, even for a time, in unsettling the minds of the poor deluded and credulous people, and prevented

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tents of; a considerable sum of money was thus obtained from the same persons, who were represented to be in a state of the utmost wretchedness and want, and that, by those very men who circulated these gross and unfounded statements. A still further sum was levied from these poor people, to pay for whiskey, furnished by one of the most active and zealous of their pretended friends. Though not immediately connected with the present subject, the following authentick facts cannot fail to put in a very striking point of view the ignorance and credulity of the people. During the course of last summer, the engineer officers engaged in taking the trigonometrical survey of the island, were employed in Sutherland; and, from being dressed in foraging caps, the people, conceived they were a detachment sent by the King of Denmark to survey the country, previous to His Majesty making an attack upon Lord Reay, in order to revenge an old feud existing between the crown of Denmark and the chief of the Mackays. Such is the *condition* of a people, which some would wish to preserve, and the destruction of which they regret, and for remedying which, others have ventured to condemn, in terms the most malignant, the conduct of Lord and Lady Stafford.

them from taking advantage of the offers held out to them. The effect was, that they spent idly and unprofitably a portion of that money which every one of them had the opportunity of realizing, and which they ought, through Lord Stafford's liberality, to have been in possession of. This, it was hoped, would have been sufficient to have enabled them to surmount any difficulties to which they were, in spite of every care to the contrary, liable to be exposed, during the first year of their settlement on the coast, or which would have afforded them the means, if such had been their desire, to have left the country for the colonies; a measure by no means recommended to their adoption, but thus put within their power.

In giving the following account of the humane and considerate views which have regulated the management of this great and rapidly improving property, no further notice will be taken of these mis-statements, except in so far as may be necessary to show what they are here stated distinctly, to be, *totally and completely false.* The

measures which have been pursued require no defence, but both the motives that dictated them, and the manner in which they have been executed, merit praise and commendation, and both are confidently anticipated.

The county of SUTHERLAND is situated between 57° 53′ and 58° 33′ North latitude, and between 3° 40′ and 5° 13′ West longitude, from London. It is bounded on the west for a distance of forty miles and a half, by the Mynch, an arm of the Atlantick Ocean, which separates it from the islands of Harris and Lewis; on the north for a distance of fifty miles, by the Northern Ocean; on the east for a distance of thirty-seven miles and a half, by the county of Caithness; on the south-east for a distance of thirty-two miles and a half, by the Moray Frith; and on the south and south-west, for a distance of fifty-two miles and a half, by the Dornoch Frith, the Oikel, and some lesser streams, which separates it from the county of Ross. The name of SUTHERLAND signifies the south part of Caithness; that province having originally included both counties. The name of Caithness, signifies

the Ness or promontory of the province of Catuibh, the Gaelic name for this district, which is the appellation by which Sutherland is still known in the dialect of the inhabitants; while Caithness is called Gallaibh, or the country of the Gauls or strangers. The clan of SUTHERLAND is called Chattach, and their chief Moir-fhear Chattaibh, the lord or the great man of Sutherland. When that dignity is vested in a female, her designation is Ban Mhoir-fhear Chattaibh, the great lady of Sutherland, the patronymick by which Lady Stafford, as Countess of Sutherland, is universally styled, in the Highlands.

The north-western district, extending from the Kyles Ku of Assynt to the water of Borgie, is the property of Lord REAY. The greater portion of the remainder comprises the estate of SUTHERLAND, which is washed on the one side by the Northern Ocean, and on the other by the Moray and Dornoch friths; within this boundary is situated the estate of Major MACKAY of BIGHOUSE, comprising Strath Hallidale, and extending to the North Sea and the estate of EMBO, the property of Mr. GORDON,

situate on the Moray Frith. Further on, extending along the Dornoch Frith, are situated the estates of Messrs. DEMPSTER of SKIBO, GILCHRIST of OSPISDALE, HOUSTOUN of CREECH; and beyond the river Shin, those of Messrs. MACLEOD of CADBOLL, MUNRO of ACHANY, MUNRO of POYNTZFIELD, of Lord ASHBURTON, and Sir CHARLES ROSS, with the barony of ASSYNT, a detached but extensive portion of the estate of SUTHERLAND.

The county of SUTHERLAND is computed to contain 1,840,000 acres, deducting 32,000 for salt water lochs.* The estate of SUTHERLAND, including the Earldom of SUTHERLAND, the Lordship of STRATHNAVER, the Barony of ASSYNT, and the late purchases made by the Marquess of STAFFORD, are computed to contain more than 800,000 acres. The estate of Lord REAY is more than half that extent. The residue of the

* The county of Sutherland has never been surveyed, the numbers of acres therefore mentioned in the text, can only be considered as an approximation to the truth, they are adopted from the appendix to Captain John Henderson's Agricultural Survey of the County of Sutherland, page 187. These acres are statute measure.

county being unequally divided amongst the remaining proprietors above mentioned.*

* In the heights and in the strath of Kildonan, the prevailing names were Gunn and Bannerman. In Sutherland proper, situated between Caithness and Lochfleet, with the glens connected with it, Sutherland and Murray are the names which are most common; but near Golspie, there is no name which prevails more than another; the name of Murray is supposed to be the original name of the Sutherlands, and to point out their origin from the other side of the Moray frith. In the vicinity of Dornoch, the names of Sutherland, Mackay, Ross, and Mathieson, are chiefly to be met with; and in Strathfleet, and at Lairg, Mackay and Matthieson, with some of the name of Sutherland. In Assynt, Macleod is the name of the people; this barony having originally belonged to that sept, but being at a subsequent period conquered by the Clan-kenzie, the tacksmen are, for the most part, Mackenzies. In the same manner, the name of Gordon is found to be a common name for the tacksmen all over the estate of Sutherland; this name having been retained, for some generations, as the family name of the Earls of Sutherland, in consequence of the marriage of Elizabeth, Countess of Sutherland, about the beginning of the sixteenth century, with Adam Gordon, Lord of Aboyn, second son of the second Earl of Huntley. Over the remainder of the county, the name of Mackay almost universally prevails. The name of Baillie, which is not uncommon, was introduced about the middle of the 15th century, on the marriage of John, the eleventh Earl of SUTHERLAND, and second of that name, with Margaret Baillie, daughter of

By referring to the map of Scotland, it will be seen that the island diminishes greatly in width, towards its northern extremity. The German ocean, extending

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the Laird of Lamington; the same has happened in several other instances. It is a matter of some curiosity to remark, that there are also several individuals of the name of Pope settled in this county. The origin of this family in SUTHERLAND, is to be traced back to the year 1585, when Mr. William Pape or Pope settled at Dornoch as a schoolmaster, and chaunter of Caithness. Some descendants of the family are also to be met with in Caithness, and a clergyman in this latter county was acknowledged by the poet to be of the same family, and kindly treated by him as a connection. Presuming upon this, the clergyman came to London, and was to have been recommended to the good offices of some of the great, by his relation, who furnished him with money to pay for the hackney coach, which was to convey him to his patron's house. The careful Scotsman thought he might save this expense and pocket the fare; but on his appearing before his friend, in all the heat his haste and anxiety had occasioned, he was quickly and angrily dismissed to his native country.

The individuals of the same name and surname, are distinguished from each other by appellations, taken sometimes from the district which they inhabit, but more frequently descriptive of some characteristick qualification, or personal peculiarity; this nickname in many cases, becomes the surname of their family; at first in addition to, and afterwards unconnected with, the name of their clan.

itself into the Moray Frith, detaches, as it were, the four northern counties of Ross, Cromarty, Sutherland, and Caithness, from the rest of the kingdom. This district, it will be observed also, is still more cut off from the southern counties, and intersected in itself by four inlets of the sea, stretching into the country, to the very base of the mountains, which constitute by far the larger portion of this part of the island. These inlets, or friths, are the Beauly Frith, which extending from Fort George to Beauly, separates Rosshire from the county of Inverness. The Frith of Cromarty, which intersects the counties of Ross and Cromarty. The Frith of Dornoch, which divides the counties of Ross and Sutherland; and Lochfleet, which intersects this latter county. These friths, however, do not, in appearance, disjoin these counties so much from each other and from the rest of the island, as they do in reality. Nor will it be difficult to imagine, that the intercourse could not be great, where several ferries were to be crossed, one of which only, the nearest one to Inverness, was provided with piers.

The others were without every accommodation, which could make them either comfortable or convenient, the passenger being left exposed to all the inclemency of a variable and boisterous climate, while his horse or carriage was slowly and unskilfully put into the wretched boats. The risk of crossing these narrow friths, hemmed in between mountains, was considerable. Exposed, to the fury of violent gusts of wind, which occasionally, and on a sudden, sweep down the glens, little time was left to prepare for the storm, or to avoid its effects; and having to contend, at the same time, with the rapidity of the tide running in various and opposing eddies, their passage was rendered at once a matter of great skill and considerable danger. The roads which connected these ferries were as rude and unformed as might be expected, and were quite unfit for travelling. Beyond the Dornoch Frith, indeed, no such thing existed. So that the county of Sutherland was not only cut off from all intercourse with the neighbouring districts and the rest of the kingdom, but its interior means of

communication was still more *defective. Consisting as this county does, almost entirely of one uninterrupted succession of wild mountain or deep morass, the intercourse between one district and another was confined exclusively, or nearly so, to the exertions of those who could travel on foot, and even this mode of communication, except to the natives who were brought up to such toil and exertion, was almost impracticable. Besides the fatigue of such an exertion, it was accompanied by considerable difficulty and danger to a person unaccustomed to such exercise, to which he was exposed in passing precipices or struggling through swamps. Being moreover, like all mountainous countries, intersected by deep and rapid rivers and numberless lesser streams, which, although at one moment nearly dry and easily fordable†,

* The coast side road was ascertained by the greener appearance of the surface; and the course for a carriage to follow was marked out by tracing two narrow ruts along the ground. There was literally only one bridge in the county, that at Brora, which does not exceed the span of 24 feet.

† This is actually the condition, at the present moment, of the parishes on the west coast of Sutherland.

are apt, in the course of a few hours, to be so swollen, as to remain for days impassable; the adventurous traveller was exposed to the chance of being cut off from all shelter, or, subjected to the sad accommodation of a highland hut.

Such was the state of the local, as well as of the external means of communication enjoyed by the county of Sutherland. Subjected to such delays, and exposed to such risks, it is almost unnecessary to add, that few strangers were tempted to visit it, either for the purposes of curiosity or commerce. The intercourse of the natives themselves, being limited to the narrowest bounds, the most serious obstacles were opposed to every improvement, or rather, this district was deprived of every chance of amelioration, so long as this state of things continued to exist.*

And the runner who carries the letters to Assynt, or the messenger who is going to Tain for the doctor, to attend his dying friend, a distance of 60 miles, is often delayed for several days, by the sudden rising of the waters.

* To such a degree was this felt, and so completely did it affect even the ordinary course of the administration of the justice of the kingdom, that the counties of

Nothing but a great and well arranged effort, could remove the obstacles, which thus on every side, and in every shape, presented themselves; arising as well from the moral as the physical circumstances in which the country was placed. However great the desire might have been to ameliorate this state of things, it is evident, that this feeling was controlled by circumstances, beyond the powers of the heritors of Sutherland to remove. Until, for example, the counties of Ross and Inverness brought the means of communication, through their respective counties, whatever might be done in Sutherland, was of little comparative use, and to do any thing very effectual, was beyond their then very limited means. *

Sutherland and Caithness have never been required to return jurors to the northern circuits, held at Inverness. The first attempt to obtain their services, in this respect, was made by the act to amend and extend the jurisdiction of the jury court, which was passed in 1819.

* The county of Caithness, though situated still further north than Sutherland, felt less than it did the inconveniences just described. It is, except where it bounds with Sutherland, a flat country, capable of cultivation to a considerable extent, and well situated for the prosecution of the fisheries; inhabited, for the greater

In the above state, matters remained, until the year 1803, when parliament, with a wise and well-judged liberality, agreed to advance a moiety of the expense of certain roads and bridges, to be constructed in the Highlands of Scotland; provided that the counties within the operation of the act should agree to assess themselves to the amount of the other moiety. Availing themselves of this assistance, the heritors of Inverness and Rosshire, came forward in the several years 1809, 1814, and 1819; and met the parliamentary commissioners in the manner above stated. The consequence of which is, that a line of road conducted according to the best principles of the art, and made in the most perfect manner, has, with the exception of a small

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part, by a population, speaking English, they having a Danish and not a Celtic origin. The people adopted, at an early period, an active life; and as there existed no bar, as far as language went, to their communicating freely with the southern parts of the kingdom, and as they soon raised a sufficient produce for exportation, they, from necessity and habit, became skilful mariners, and carried on an active intercourse with the rest of the island by sea.

piece now in hand, been constructed from the town of Inverness by Beauly and Dingwall, to the boundaries of the county of Sutherland; two excellent stone bridges, consisting of five arches each, having been built across the Beauly and Conon * rivers. This line of communication, with the above exception, was opened for the public accommodation in the year 1816 and 1817.

The county of Sutherland was still more forward in availing itself of the vast benefits to be derived from this liberal and well-conceived munificence of parliament: though the works they had to undertake presented greater difficulties in their execution. The two principal obstructions they had to contend with and to surmount, were those which were occasioned by the two friths of Dornoch and of Loch Fleet. The former, especially, presented obstacles of considerable moment, arising out of the width of the Channel, and the want of a proper foundation on which to construct a

* The moiety of the expense of constructing the bridge across the Beauly, was advanced entirely by the late Lovat, from which circumstance it is called Lovat bridge.

bridge. If the same plan had been followed in this instance, which has been adopted on the two southern ferries, namely, of ascending to the point at which the frith terminates and becomes a river, it would have carried the road so much into the interior, as to counterbalance those advantages which are at all times obtained, by the substitution of a bridge, in place of the most perfect ferry which can be established. To avoid either of these inconveniences, a very careful survey of the whole frith was made, and Mr. Telford determined to recommend the construction of an iron bridge, of magnificent dimensions, at a place called Bonar, a point where the frith narrows itself considerably; and above which it again expands, though not to its former dimensions. The county of Sutherland adopted the proposal, and though it forms the junction between the two counties of Ross and Sutherland, the whole of the moiety, not advanced by the public, was borne by the heritors of the latter county. This structure consists of an extensive embankment on the Rosshire side, with two stone arches of FIFTY and SIXTY feet span respectively;

and one iron arch of ONE HUNDRED AND FIFTY feet span. It does great credit to the talents of Mr. Telford, its engineer; it was cast in Denbighshire, where it was first put together, and then taken to pieces and re-erected in the furthest extremity of the Highlands of Scotland, and exhibits, in that remote district, a striking monument of the national enterprise and liberality, and of the public spirit of the county of Sutherland. Affording no mean proof of the extent to which, in this country, the arts have been made to contribute to the comfort and accommodation of life; and in the present instance, to the civilisation and improvement of the kingdom, in one of its most distant and sterile districts. This work was commenced subsequent to the month of June, 1811, and was completed and taken off the contractor's hands in November, 1812. A wonderful short time for the execution of such an undertaking, especially in so remote a situation, being less by one year, than the period within which it was stipulated to be completed. It cost THIRTEEN THOUSAND NINE HUNDRED AND SEVENTY ONE POUNDS STERLING.

From this point, with the same aid, the heritors of Sutherland have constructed a road to Tongue, the seat of Lord Reay, situated upon the Northern Ocean, a distance of about fifty miles, which was commenced in 1810, and is just completed; — and another towards the county of Caithness, which is separated from Sutherland by a lofty range of mountains, intersected by deep and almost impassable ravines, terminating in a vast precipice, jutting into the sea, well known by the name of the Ord of Caithness. The new road is conducted across these ravines, and over the mountain with such skill, that the traveller is unconscious of the height to which he has ascended, until the diminished sight of the objects below him, point out to him the reality.* The length of this road is about forty-one miles. It was undertaken in different portions, and begun in the several years of 1807, 1809, 1811, and 1813, and finished respectively in the year 1811, 1813, and 1814. In the line of this road

* The county of Caithness has continued this line of communication through Wick to Thurso, situated on the Pentland Frith.

occurs the arm of the sea, called Loch Fleet, or the Little Ferry, already mentioned. Though inferior in magnitude to the others, it afforded no such facility for constructing a bridge as they did. By this frith not only the general line of the communication of the country was interrupted, but by intersecting the county, a large portion of it was cut off from all regular intercourse with Dornoch, the county town, and the seat of the sheriff's jurisdiction. To remedy this serious inconvenience, was an object of the first importance, and in order to accomplish it, it was determined to construct a mound across the narrow part of the channel, so that by excluding the sea, a constant and uninterrupted communication between the two ends of the county might be secured. The extreme length of this mound is NINE HUNDRED and NINETY-FIVE YARDS, exclusive of the bridge; its width at the base SIXTY YARDS, sloping to about TWENTY feet at the top: its perpendicular height being about EIGHTEEN FEET. The highest tide which has happened since its construction, rose TEN FEET FIVE INCHES on the mound, perpendicular

height. At the north end it terminates in a strongly built bridge, THIRTY-FOUR YARDS long, consisting of four arches, of twelve feet span each, fitted with strong valve gates. It is, in all probability, one of the most complete structures of the kindin the island. The estimated expense of this work including some additions and alterations, amounted to about NINE THOUSAND POUNDS. Of this sum Lord Stafford subscribed ONE THOUSAND POUNDS as the probable amount, by which the estate of Sutherland might be benefited, by excluding the flowing of the tide over some good land, and by obtaining about 400 acres of beach, which may, in time, push out a rough herbage, and thus gradually fit itself for culture. The remainder of the expense was borne in equal moieties, by the parliamentary commissioners and the county; but an excess above the estimate of about SIX HUNDRED POUNDS was defrayed by his Lordship, in order to save the contractors, Messrs. Young and Sellar, who had, from public-spirited motives alone, along with Lord Gower, undertaken this work. This excess was occasioned in consequence of the sea having broken through the mound,

upon the first attempt which was made to exclude it. Rushing through with the most tremendous impetuosity, it destroyed a considerable portion of the work, and excavated a large chasm in the bed of the frith, thereby increasing materially the total expense of completing it.

Anxious to avail themselves of these publick roads, which formed the great outlines with which all others should communicate, new and excellent roads have been constructed by the heritors of the county, from the coast-side or Dunrobin road, to Dornoch. This has been accomplished by a more judicious application of the statute labour, assisted by compounding some arrears due by the poorer tenants on the estate of Sutherland, for work done by them on the highways. In this manner also, a road of the best description has been made, from the north end of the mound, up Strathfleet to Lairg, a distance of fifteen miles. This road connects the Dunrobin and Tongue roads. Bringing these districts of the estate into direct communication with the coast, and the management, while it at the same time forms the best and readiest means of getting from

the Reay country, to Dornoch. Its importance may be estimated, by mentioning that that which a year ago was the work of a day, may now be accomplished in a few hours.*

* The same system has been extended to the other valleys which terminate on the east coast of Sutherland. Considerable progress has been already made in constructing roads up Dunrobin Glen, and Strathbrora. These two roads, when united among the hills, will be gradually conducted through Rogart, until they join the Strathfleet road. Another road has been made up Lothbeg Burn to near Kildonan, where it will fall into the Strath Helmsdale, and Strath Hallidale road. A considerable portion of this latter line has been already made towards the bottom of the Strath, and above Kildonan; and it is hoped that it may soon be completed, by a continued application of the statute labour of the district, with other assistance. This road is of vast importance, as it would lay open a great extent of country, at present excluded from all communication with the coast; and would form the direct road from Thurso and Bighouse to the south. To the estate of Sutherland it would be of further use, as it would connect the thriving fishing station of Helmsdale on the Moray Frith, with the various fishing villages established on the north coast; from the mouth of the Naver to Strathy Point inclusive. To connect these with each other, and Tongue with Thurso, would materially advance the prosperity of this district; and for some years back the road has been gradually improved, under the superintendence of the Strathnaver factor, and it will be more rapidly carried on for the

The extent of these works, the difficulty of their execution, and their importance

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future, in consequence of an arrangement between Lords Stafford and Reay, to that effect. In order to afford the people of Strathnaver the means of communicating with the Tongue road, and by means of it with Dornoch and Dunrobin, the statute labour of the district has been assisted in forming a bridle-way from Altnaharrow, situated on the Tongue road, near the upper end of Loch Naver to Syre, down, the north side of the Loch; from which latter place there is a tolerable road to the bottom of the Strath. This road was particularly difficult to construct, arising from the numerous blocks of stones with which the sides of the mountains are covered. In the same manner Lord Reay, being desirous to afford a similar accommodation to the distant parishes of Durness and Edrachyllis, proposes, in conjunction with his tenants, to execute a bridle-way to Durness and Scourie. This road will also branch off from the Tongue road at Altnaharrow. The first four miles passes through the estate of Sutherland, for which distance Lord Stafford has agreed to subscribe in his relative proportion, in order to secure so great a benefit to the Reay estate.

But there still remains all the district lying to the west of the Shin, completely cut off from every intercourse with the rest of the county, and Lord Ashburton is at the present moment obliged either to ford that very dangerous and rapid river, before he can get to his house, and that on horseback, or to reach it by water. A bridge over the Shin, however, is in contemplation, with the addition of such piece of road as is necessary to connect the bridge with a road of ex-

and value to the country, can hardly be felt or estimated, by those persons who have been accustomed from their infancy, to the facility of communication and the excellent roads of the south, and to the ease with which a new line can be made, or an old one repaired; unless they consider the immense length of roads both already ex-

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cellent construction, made by Lord Ashburton through his own estate, but which at present, as a means of general communication, is perfectly useless. It must be a considerable time, however, before the means at the disposal of the district, will enable this road to be extended to Assynt. To the interior communication of this latter district, much has been done under the superintendance of the Assynt factor, in improving the leading road from Ledbeg to Loch Inver, perhaps the most rugged country in the world, through which a road has ever been conducted.

A proportion also, of the statute labour of the parishes of Creech and Dornoch, has for some years past, been applied to the construction of a new road, branching from Bonar bridge, in a straight line towards the north. This road, it is proposed to carry by degrees down Strath Carnock, by Torboll to the north-west end of the mound. When completed, it will save near five miles between these two points. A further application of the statute labour of the parish of Dornoch has been made in the construction of a new road from Clashmore Inn, to the Mickle Ferry, and from the Dunrobin road to Embo.

ecuted and to be yet finished, compared with the slender means which a poor, remote, and barren district affords for their construction, and unless they consider the obstacles which are to be surmounted in carrying them into effect.*

In many places, these roads are cut through the hardest rock; in others they are obliged to be supported on bulwarks of solid masonry. Expensive drains to protect them from the mountain floods, and bridges over the innumerable streams that rush from the hills in every direction, are required. These must be formed of the most durable materials, and the best workmanship to resist the impetuosity of the torrents. Nothing will set this in so striking a point of view, as to state, that, upon the projected road to Assynt, a distance of

* A mountainous country, besides, requires a greater number of roads for its accommodation, than a flat champaign district. Each valley in the former, however narrow, or however near to another, calling for its own particular line of communication, owing to the impracticability of passing across from one glen to another. In the plain, no such difficulties arise: one main road serves a considerable district, communicating easily with the country situated to the right and left.

forty-six miles, three bridges of three arches each, two bridges consisting of one arch of forty feet span, five of twenty feet span each, three of twenty-four, six of eighteen, two of twelve, besides many others of inferior dimensions, would be required. When to this is added, that the lime and timber necessary for their construction had to be imported; that huts had to be constructed for the workmen; that artificers had to be brought from a great distance; and a supply of food, carefully stored up, and purchased from the neighbouring counties; a correct idea will be obtained of the obstacles which were encountered, in carrying these improvements into effect, and which still, in a great degree, stand in the way of the progress of those which remain to be done.

Thus then, in the course of twelve years, has the county of Sutherland been intersected, in some of its most important districts, with roads, in point of execution superior to most roads in England. And owing to the equally praiseworthy exertions of the counties of Ross and Inverness, on the one hand, and of Caithness on the other, the same perfect means of communi-

cation now exists, from the Burgh of Inverness, to the town of Thurso upon the North Sea.

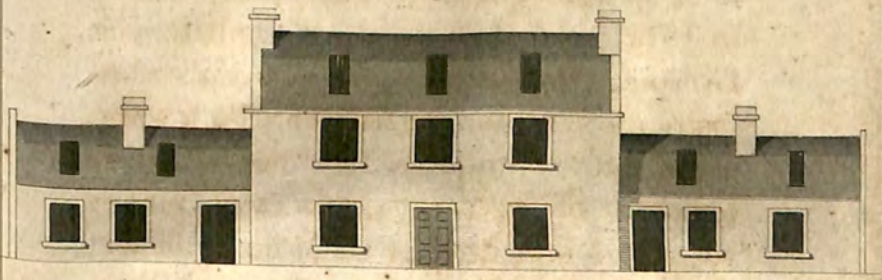
This important measure having been accomplished, it was desirable that the benefits to be obtained from it should be realised as speedily as possible. In no particular could this be obtained so effectually, as by having the post conveyed in a more regular method than it had hitherto been. Previous to the year 1819, the post was conveyed on horseback to Tain, and from thence, across the friths by foot runners. In 1818, a memorial was laid before their Lordships the Postmaster-general, praying them to establish a daily mail diligence, between Inverness and Thurso, stating at the same time, that if their Lordships should be pleased to acquiesce in this request, that the counties of Ross and Caithness, and the Marquess of STAFFORD on behalf and in lieu of the county of SUTHERLAND, would each, for two years, subscribe the sum of TWO HUNDRED pounds a year, in aid of this establishment. Their Lordships acceded to the prayer of the petition, and with the greatest liberality granted it every aid which, according to

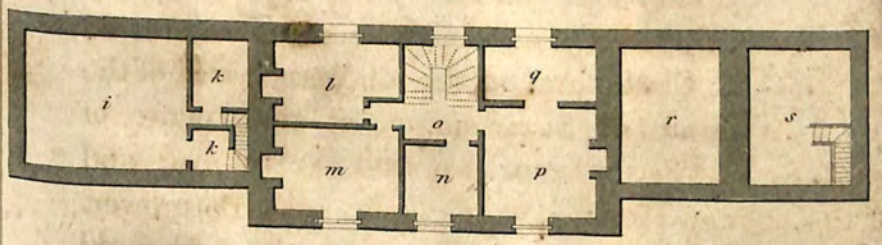
the rules of the office it was in their power to do. This conveyance began running in July, 1819. It may be safely stated, that in the history of the country, there is no parallel of so rapid a change as has thus been effected in this distant corner of the island. Passing at once, from a state of almost absolute exclusion from the rest of the kingdom, to the enjoyment of the incalculable advantages of the mail-coach system, at a distance of EIGHT HUNDRED AND TWO miles from the capital of the empire, and ONE THOUSAND AND EIGHTY-TWO miles from Falmouth, the furthest extremity in the other direction to which this establishment extends. Joining as it were, by one common bond of intercourse, the two most distant ports of the island, the one situated at the extremity of the English Channel, the other on the coasts of the Frozen Ocean.

To accomplish this, was a matter of more difficulty than would probably occur to a person who never witnessed the first steps of a country, towards this advanced state of comfort and of society. The horses had all to be bought in Edinburgh, a distance of between THREE and FOUR HUN-

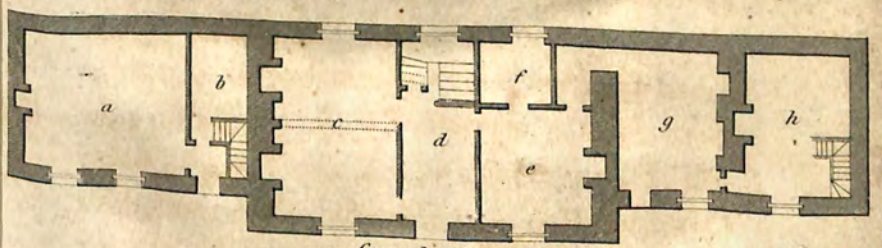
DRED miles; stables had to be built for their accommodation. Lord Stafford had, in 1811, erected an excellent small Inn, at Golspie, at an expense of SEVENTREN HUNDRED POUNDS, and another at Portgower, about fifteen miles further north, at an expense of FIVE HUNDRED AND EIGHTY POUNDS, but neither of them had sufficient stabling. There was no Inn between Bonar Bridge Inn and Golspie, a distance of twenty-four miles. In order to remedy this defect, a new Inn and offices was erected at Clashmore, on the southern march of the estate of SUTHERLAND, at an expense of NINE HUNDRED AND SEVENTY POUNDS; and new stables at Golspie and Portgower. If this had not been done, the mail could not have been undertaken. A post-office at the end of the town of DORNOCH was also built, to facilitate the same object. Lord STAFFORD also subscribed THREE HUNDRED POUNDS towards the erection of a new inn at Bonar Bridge, on the estate of Sir CHARLES ROSS, in the adjoining county, in order to form a stage between NOVAR or TAIN, and CLASHMORE. The only stipulation which was made, being, that the house

PLAN AND ELEVATION
OF THE INN AT GOLSPIE ERECTED 1809.



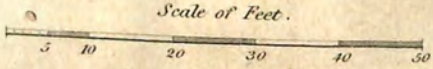


First Floor



Ground Floor.

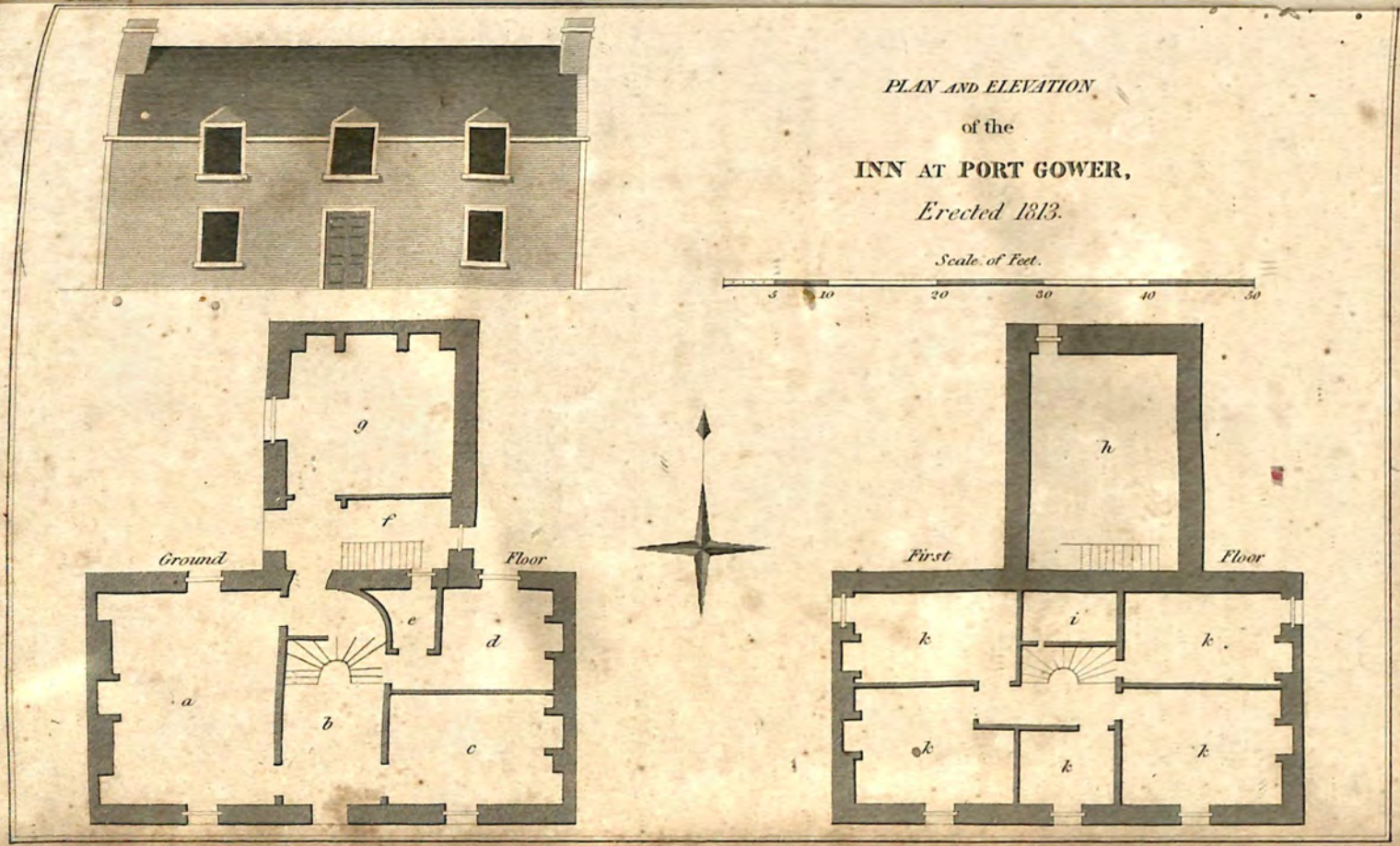
Scale of Feet.



Alexander Golspie, del.

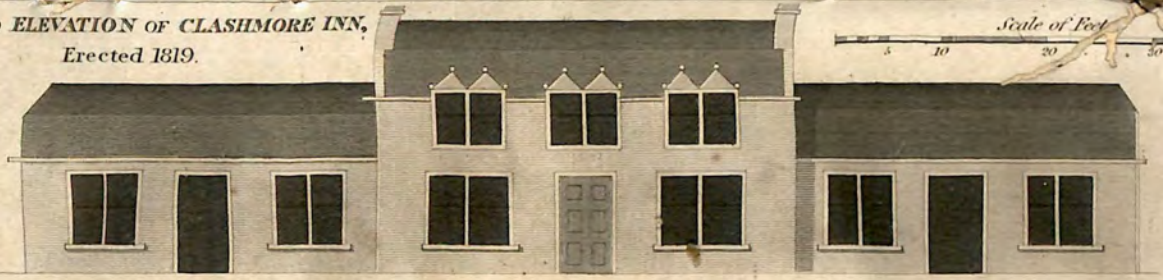
Pub. by Longman & Co. July, 1820.

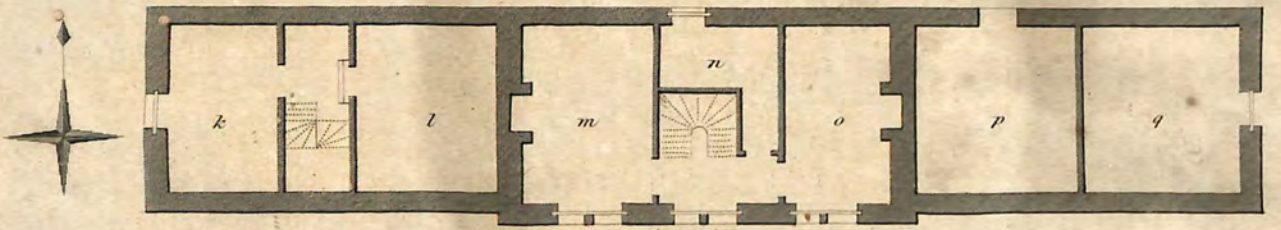
Sidy. Hall, sculp.


PLAN AND ELEVATION
of the
INN AT PORT GOWER,
Erected 1813.
Scale of Feet.
5
10
20
30
40
50
Ground
Floor
First
Floor
a
b
c
d
e
f
g
h
i
k
k
k
k
k

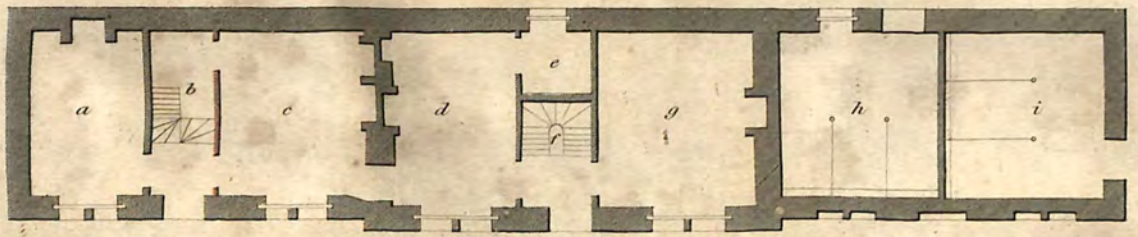
PLAN AND ELEVATION OF CLASHMORE INN,
Erected 1819.

Scale of Feet
5 10 20 30 40





First Floor



Chamber ..... Floor

Geo. Alexander Gelspie del.
Pub.by Longman & Cº. July, 1820.
Sidé Hall sculp.

should not be let to sportsmen, but kept for the accommodation of travellers solely.

Owing to the high northern latitude of the county of Sutherland, and its almost insular position, the air is moist and sharp, and the exposure to the sea-breeze, renders it adverse to the rapid growth of timber, especially near the coast. In sheltered bays and glens, where the soil is deep, trees reach a respectable size. The wych-elm, the sycamore, and the ash thrive best. Of the latter sort, there are two trees at Dunrobin, which measure twelve feet in circumference at the height of eight feet from the ground. The climate is variable: but though the winters are tedious and boisterous, it is seldom that the snow lies long upon the coast, and even in the interior it prevails less than in the central Highlands of Inverness and Perthshire. The springs, are cold and ungenial, and are frequently prolonged late into the year, so that the summers are consequently short. But as the sun at this season has great power during the day, owing to the length of time it is above the horizon, and the heat being much increased by the intense

reflection from the hills, a most rapid vegetation takes place, and the harvest, upon the coast side, is got in earlier than in a large proportion of Scotland. Indeed, the wheat upon the Mains at Dunrobin has been housed more than once, before that upon the Home farm at Trentham. The evenings, however, are never warm, and among the mountains, are always very cold, piercing, and chilly, frequently accompanied with mildews and early frosts, which, sweeping down the glens and the courses of the burns, destroy every sort of crop and cultivated vegetable. The commencement of October is generally fine clear weather, but the remainder of the year is boisterous and unsteady.

Few districts of Scotland possess so small a proportion of land fit for cultivation, compared with its extent; and previous to the year 1811, even a small portion of that was brought into cultivation. Each shore is fringed (if the expression may be used) with a narrow border of arable land, which, on the south-east coast, extends from a few hundred yards to about one

mile in breadth. The interior, as has been already stated, consists entirely of mountains, which, rising rapidly from the cultivated land or from the shore, and increasing in height as they retire from it, are intersected by deep and narrow glens, forming the beds of the burns that descend in every direction to the rivers, which conduct their waters to the ocean. These burns derive their source from extensive morasses formed at the base of the loftier mountains, and in their course, generally stretch into extensive highland lochs; wherever the valleys widen. These lochs comprise about 32,000 acres of the whole surface of the county. The mountains towards its eastern and central divisions, are of a round and lumpy form, covered naturally with heath, until the burning for sheep enables the grass to spring up. Those situated towards the west coast are a complete congeries of rock heaped one upon another, between the interstices of which the grass grows with much sweetness; and, where the spaces are larger than usual, the inhabitants carry on a precarious cultivation, by means of a push spade called the Cascrom.

The same arrangement of society which distinguished the rest of the Highlands of Scotland, prevailed in this county, perhaps however to a greater degree than it ever did further south. In proportion as the distance from the seat of government was more remote, the power of the crown diminished, while that of the chief was augmented. This natural tendency of things was vastly increased, with respect to Sutherland, in consequence of the local situation of the district, cut off and separated, as it was, from the rest of the kingdom. For a considerable part of the earlier period of the Scottish history, we perceive the Earls of Sutherland and Caithness taking but little concern in the general turbulence of the kingdom. Though from the curious and valuable history of the family of Sutherland, written by Sir Robert Gordon about the year 1630, we find them engaged in their own particular contests, with all the fierceness and animosity which are the consequences of a near vicinage, and characteristick of rude times. They seem accordingly to have felt but slightly the effects of those disasters and revolutions, which deluged

the rest of the country with its best blood, and swept away most of its distinguished families.

In such a state of society, the wealth of a chief consisted in the number of men he could command to attend him in his external aggressions, or who should be ready to defend him, when attacked. As the country advanced in civilization, other objects of ambition arose, which money alone could procure. And the population of the highlands remained no longer an object to be encouraged beyond that point, which was required for the necessary demands for labour on the estate, or to realize a money rent. The increase of the manufactures of the south of Scotland, and the enlargement of her towns, gradually absorbed the surplus population of those districts of the highlands, which bordered upon the low country. The new scenes of industry which were created, and the fishing villages which were established throughout those counties which extend from Aberdeen to Inverness, afforded accommodation and employment to a large proportion of those, who were from time to time moved from the

highland districts in their vicinity; so that, in those parts of Scotland, the change was regulated by that additional demand for labour, which the increasing improvement of the country required; and as that was going on with a rapidity rarely equalled, the whole was executed speedily and yet quietly. Besides, this progress was much facilitated in consequence of those Highlanders who were situated nearer to the lowlands having, from such vicinage, gradually acquired more steady and industrious habits; and what was still more important, from their having acquired such a knowledge of the English* language, as to remove

* Many attempts have been made of late years, by different excellent and worthy gentlemen connected with the highlands, to arrest the inevitable and rapid extinction of the Gaelick language. This certainly would be a matter of deep regret, in the view which has been taken of the detrimental effects which the existence of this dialect produces, in retarding the improvement and progress of one portion of the people of Britain, if it could be conceived that these attempts would be attended with success. But the co-existence of the two languages is impossible, and in spite of every such effort, the progress of the English language must be rapid and irresistible. Every cause combines to produce this effect, founded in the interest of the people themselves. And so difficult is it

that barrier, which the prevalence of the Celtick tongue presents to the improvement and civilization of the district, wherever it may prevail, as it cuts off from the people those means of communication and intercourse enjoyed by the rest of their fellow-subjects. From the west and central Highlands, on the contrary, where there did not

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to judge of the effect of moral causes, as to how they will operate on a community, it is found, that nothing contributes more towards this change, than the measures which at first sight would have appeared the most calculated to produce the contrary effect, namely, the establishment of Gaelick schools, combined with the publication of an English and Gaelick dictionary. The youth, however, who has been taught to read, will never confine himself to the knowledge of a language, in which no book was ever written, and which has never served the purposes of commerce, or of government; and the publication of a dictionary, though it may facilitate the Highlanders, in the acquisition of English, will never induce a Saxon to learn the language of the Gael. It requires no gift of prophecy, to be able to pronounce, that many years have not to run, when the Celtick tongue, upon the main land of Scotland at least, will cease to be a living language; and that this will happen, without the country losing any of those distinctive nationalities, which nurture and preserve a generous rivalship in the great interests of British policy.

exist the same facilities in disposing of the surplus population, or the same advantages as to speaking English, a considerable emigration to America took place.

From the description which has been given of the local situation of SUTHERLAND, it is evident that it was destined to be the very last part of the highlands, likely to be affected by the rapid change which was so powerfully operating upon every other part of the island. Bound down by circumstances, from which they could not relieve themselves, the Earls of SUTHERLAND continued to find, that the principal means by which they had to maintain that station in the country which their rank and descent entitled them to hold, was, by raising for the service of government, one of those corps, well known by the designation of a "family regiment." The consequence was, that the unhappy system of encouraging and fostering a superabundant population was persevered in. And the greater security of the times, and the absence of domestic feuds, with an accession of people from the southern highlands, as they were from time to

time converted into sheep-walks, promoted the increase, while it cut off the check to such an over-abundant population.

The effect of this last circumstance was very important, and one which was at the same time, very detrimental to the estate, as it not only increased the number of people in an unnatural manner, but did so with a population the least desirable in point of industry and exertion. The numbers of the people of SUTHERLAND received also an occasional addition in a way still less likely to improve their habits. This county formed a receptacle for many of those tenants of Ross-shire and the adjoining counties, who escaped into it in order to avoid paying the rent they owed their landlord, as well as to many of those who were ejected from these counties for irregular conduct. Thus was the county of SUTHERLAND kept in the same state it had been for ages, or rather, the evils of the system were infinitely increased throughout, at the very time that the rest of the country was rapidly advancing in the contrary direction.

Every tacksman paid the bulk of his rent, by the number of men he could raise,

and his son or his kinsman was promoted in the SUTHERLAND regiment, according to the number of recruits he furnished. All claimed kindred, more or less remote, with the Chief. They were his companions in peace as they were his associates in war. Their habits were, therefore, the very reverse of industrious, and the very last wish of their heart was, that any change or improvement, should be introduced; the first consequence of which must have been to put an end to the easy and idle life they led, and which would oblige them to adopt habits of regular industry, and continued application. That portion of their rent which was payable in kind, or in money, (the former being by far the most common,) was obtained by their subletting part of their lands, in the most exorbitant manner. They exacted from their subtenants, services which were of the most oppressive nature, and to such an extent, that if they managed well, they might hold what they retained in their own occupation, rent-free. This saved them from a life of labour and exertion. The whole economy of their farm, securing their fuel, gathering their

harvest, and grinding their corn, were performed by their immediate dependants.*

In latter times the system, however, was in some degree changed; the Chief found he had a more complete controul over his people, if they were made his own immediate tenants; and the ranks of his regiment were as speedily filled up, leaving him with fewer claims upon him for commissions, and therefore, with more power and influence in the selection of his officers. A large body of the subtenants thus came to hold immediately of the landlord. In point of circumstances, they were improved, in as far as the services they had to perform were fewer, and less severely exacted. They however continued to be much oppressed in the mode in which their rents were reserved and made payable. A certain district was let to the whole body of tenants resident in each "town," † who

* In illustration of this statement, there is added in the Appendix, a statement of the rent, payable by the sub-tenants of Kintradwell, for the year 1811; it is a document well worthy of attention.

† A word used in Scotland as well as Ireland, in place of township.

bound themselves, conjointly and severally, for the payment of the whole rent.

This land was held, as expressed in Scotland, "run rig," or like common field land in England, but in much smaller patches. The amount of the whole rent was settled by the factors, which, together with the land, was apportioned by an inquest or jury of elders, among the different occupiers. The land was first classed according to its quality; each division was then divided into as many lots as there were occupiers, dispersed over every part of the "town." The hill pastures were held in common; the right of pasturage being regulated by the extent of arable ground which each person held.

In case default was made by any worthless fellow, he was left to do as he liked; and the industrious, the hard-working, sober man, who had already discharged his own rent, was called upon, and obliged to pay a portion of that due by the idle profligate who escaped. The cruelty and oppression occasioned by this mode of proceeding was beyond belief; so deep a root

had it taken, however, that it was not until 1816 that it could be completely abolished.

Such being, until very lately, the condition of the estate of SUTHERLAND, the effect was to scatter thickly, a hardy but not an industrious race of people up the glens and over the sides of the various mountains; who taking advantage of every spot which could be cultivated, and which could with any chance of success be applied to raising a precarious crop of inferior oats, of which they baked their cakes, and of bear, from which they distilled their whiskey, added but little to the industry, and contributed nothing to the wealth of the empire. Impatient of regular and constant work, all the heavy labour was abandoned to the women, who were employed, occasionally, even in dragging the harrow to cover in the seed. To build their hut, or get in their peats for fuel, or to perform any other occasional labour of the kind, the men were ever ready to assist; but the great proportion of their time, when not in the pursuit of game, or of illegal distillation, was spent in indolence and sloth. Their huts were of the most

miserable description. They were built of turf, dug from the most valuable portions of the mountain side. Their roof consisted of the same material, which was supported upon a rude wooden frame, constructed of crooked timber, taken from the natural woods belonging to the proprietor, and of moss fir dug from the peat bogs. The situation they selected, was uniformly on the edge of the cultivated land, and of the mountain pastures. They were placed lengthways, and sloping with the declination of the hill. This position was chosen, in order that all the filth might flow from the habitation without further exertion upon the part of the owner. Under the same roof, and entering at the same door, were kept all the domestick animals belonging to the establishment. The upper portion of the hut was appropriated to the use of the family. In the centre of this upper division was placed the fire, the smoke from which was made to circulate throughout the whole hut, for the purpose of conveying heat into its farthest extremities. The effect being to cover every thing with a black glossy soot, and to

produce the most evident injury to the appearance and eye-sight of those most exposed to its influence. The floor was the bare earth, except near the fire-place, where it was rudely paved with rough stones. It was never levelled with much care, and it soon wore into every sort of inequality according to the hardness of the respective soils of which it was composed. Every hollow formed a receptacle for whatever fluid happened to fall near it, where it remained until absorbed by the earth. It was impossible that it should ever be swept; and when the accumulation of filth rendered the place uninhabitable, another hut was erected in the vicinity of the old one. The old rafters were used in the construction of the new cottage, and that which was abandoned, formed a valuable collection of manure for the next crop.

The introduction of the potatoe in the first instance, proved no blessing to SUTHERLAND; but only increased this state of wretchedness. Inasmuch as its cultivation required less labour, and it was the means of supporting a denser population. The cultivation of this root was eagerly adopted;

but being planted in places where man never would have fixed his habitation, but for the adventitious circumstances already mentioned, this delicate vegetable was, of course, exposed to the inclemency of a climate for which it was not suited, and fell a more ready and frequent victim to the mildews and early frosts of the mountains, which frequently occur in August, than the oats and bear. This was particularly the case along the course of the rivers, near which it was generally planted, on account of the superior depth of soil. The failure of such a crop brought accumulated evils upon the poor people in a year of scarcity, and also made such calamities more frequent. For in the same proportion as it gave sustenance to a larger number of inhabitants, when the crop was good, so did it dash into misery, in years when it failed, a larger number of helpless and suffering objects.

As often as this melancholy state of matters arose, and upon an average it occurred every third or fourth year to a greater or a lesser degree, the starving population of the estate, became neces-

sarily dependant for their support on the bounty of their landlord; an appeal which was never made in vain. This relief was by no means confined to those who held immediately of the chief. It was claimed by every individual on the estate. Nor was it always easy to draw the proper line of distinction. The tacksmen, although deriving the whole benefit arising from the services of their subtenants in years of plenty, endeavoured to cast as large a share of their support from off themselves as it was possible, when the pressure of the times made an exertion in behalf of the people necessary. The payment of what they owed in such times, by the smaller tenants, was out of the question; and none were unwilling to make such a distressing state of things an apology for the non-payment or a deduction of rent. It cannot but be remarked, that, in proportion as the claims upon the landlord increased, was his means of satisfying them diminished.

So long as men, for recruiting the SUTHERLAND regiment, were the great ob-

ject of consideration, the chief had no reason, nor did he complain of this arrangement. It was one of those taxes he laid his account with paying, in order to maintain and support that system, from which he derived part of his consequence and influence. When, however, this regiment, like every other corps of the same description, was made a regiment of the line, and became subject to every regulation applicable to the rest of the King's army, a complete alteration took place in its whole character and economy. It was no longer commanded by the chief, or by any person nominated by him, the officers were no longer of his selection, nor was it now permitted to remain the instrument of private influence, in forming part of the publick defence. It was certainly desirable, therefore, that a system should not be continued, which was so ruinous in itself, while the only benefits which were ever derived from its continuance, were entirely done away with.

Clear and distinct as this principle is, it was not easily acquiesced in, by those who were

the sufferers by the change. And many of the discharged men of the 93d, entertained the expectation, although well and liberally rewarded by the bounty of the nation, that they should still have obtained farms in the same manner as those, who, after having served the views and forwarded the interests of their Chief, had tacks of land granted to them, as well in return for that which they had performed, as an inducement to tender their future services. The dissatisfaction which a contrary arrangement produced with them, was such as might have been looked for; and when these men found their demands were not complied with, they did not hesitate to give expression to the irritated state of their feelings, in every way they thought was most likely to be disagreeable to the proprietor, and harassing to the factor. That such should have been the effects of so great an alteration to them, is not surprising; nor is it wonderful that some of them should have become discontented, and, if they obtained a farm, should frequently have been the least improving tenants on the estate. Being by nature shrewd and intelligent,

their understandings were improved by the service they had seen. Possessed of the rudiments of education, by being able to read and write, and, above all, having acquired the advantage of the use of the English language, they became the advisers and the organ of communication between the people and the management. Obtaining in this way a great influence over their ignorant and credulous countrymen, they readily, and without difficulty instilled into them the same prejudices and jealousies with which they themselves were possessed; in the hope, that by producing a show of resistance to the plans of improvement which were adopted, they might have been able to force things back to that state, under which they themselves would have enjoyed the lands that they preferred. Guided by these feelings, many of them have constantly been the willing instruments of those who have from time to time, from motives which have been already distinctly referred to, endeavoured to disturb the progress of those arrangements, which had been so steadily pursued by Lord and Lady STAFFORD for the improvement of their estate,

and the benefit of the people. In some instances, they have prevailed, for a time, in preventing the people accepting the liberal offers which were made to them; trusting that if they could have induced a considerable number to have resisted, they might have made out some case of hardship or distress, which would either induce or force the proprietors to abandon their praiseworthy exertions. In the long run, however, an understanding of their interest, to which they are all fully alive, if not the good sense of the people, always prevailed and defeated these projects.

So long as the system, just described, remained in full force, no attempt could be made to improve or meliorate the situation of these poor people. To better their condition, however; to raise them from such a state of continual poverty and occasional want; to supply them with the means, and to create in them the habits of industry, was, and is the bounden duty of the owners of every such property. And it was not less their duty to do so, because the same arrangement, which was calculated to produce this salutary effect,

was at the same time the best suited to increase the value of their property, and to add to the general wealth of the community. The greater the means, and the more extensive the influence of the proprietors, the more were they called on for this exertion, as well for the sake of their own people, as an example to others. None felt the full extent of this obligation more than the proprietors of the estate of SUTHERLAND. But such an attempt was one not to be undertaken without much consideration; and when fully determined on, it was not a matter to be easily accomplished.

The circumstances which have been detailed, must show that no country of Europe at any period of its history, ever presented more formidable obstacles to the improvement of a people arising out of the prejudices and feelings of the people themselves. To the tacksman, it is clear, from what has been already stated, such a change could not be agreeable. Its effect being to alter his condition, and remove him from a state of idle independence, in habits almost of equality with his chief,

to a situation, although fully, if not more respectable, yet one in which his livelihood was to be obtained by his exertions and industry, and in many instances by an application to pursuits, which were by him considered as beneath the occupation of a gentleman, although leading to real independence and wealth, to a degree he never could arrive at in his original condition. Nor could it be agreeable to him to lose that command and influence, which he had hitherto exercised without controul, over his sub-tenants and dependants; while it was at variance with every feeling and prejudice in which he had been brought up and educated. It required minds of no ordinary cast to rise superior to these feelings: and men of no common understanding and vigour of intellect were required, to shake off habits so opposed to active industry and exertion. From a certain set of this class, therefore, a real and determined opposition to any change was to be looked for. This expectation has not been disappointed; and it is from individuals of this class, and persons connected

with them, that those false and malignant representations have proceeded, which have been so loudly and extensively circulated. Actuated by motives of a mere personal nature, regardless of the happiness of the people, whose improvement it was the great object of the landlord to effect, they attempted to make an appeal in favour of a set of people who were never before the objects of their commiseration, in order that they might, if possible, reduce them, for their own selfish purposes, to that state of degradation from which they had been just emancipated. This was, however, by no means true of the whole, or of the greater part of this class of gentlemen; for the bulk of the most active improvers of SUTHERLAND are natives, who, both as sheep farmers, and as skilful and enterprising agriculturists, are equal to any to be met with in the kingdom. They have, with an intelligence and liberality of feeling which reflects upon them the highest honour, embraced with alacrity the new scene of active exertion presented for their adoption; seconding the views of the landlords with the utmost zeal, marked

with much foresight and prudence. Out of the TWENTY-NINE principal tacksmen on the estate, SEVENTEEN are natives of SUTHERLAND, FOUR are NORTHUMBRIANS, TWO are from the county of MORAY, TWO from ROXBURGHSHIRE, TWO from CAITHNESS, ONE from MIDLOTHIAN and ONE from the MERSE.

So strong, however, were the prejudices of the people, that, even to those who were subjected to the power and controul of the tacksman, this mode of life had charms which attached them strongly to it. He extended, in some degree, to the more respectable of those who were placed under him, the same familiarity which he received from the chief. The burthen of the out-door work was cast upon the females. The men deemed such an occupation unworthy of them, continued labour of any sort being most adverse to their habits. They were contented with the most simple and the poorest fare. Like all mountaineers, accustomed to a life of irregular exertion, with intervals of sloth, they were attached with a degree of enthusiasm, only felt by the natives of a poor country, to their own glen and mountainside,

adhering in the strongest manner to the habits and homes of their fathers. They deemed no comfort worth the possessing, which was to be purchased at the price of regular industry; no improvement worthy of adoption, if it was to be obtained at the expense of sacrificing the customs, or leaving the homes of their ancestors. So strongly did these feelings operate, that it cost them nearly the same effort to remove from the spot in which they were born and brought up, though the place of their new dwelling was situated on the sea-shore, at the mouth of their native Strath, or even in a neighbouring Glen, as it cost them to make an exertion equal to transporting themselves across the Atlantick.

The cattle which they reared on the mountains, and from the sale of which they depended for the payment of their rents, were of the poorest description. During summer they procured a scanty sustenance, with much toil and labour, by roaming over the mountains; while in winter they died in numbers for the want of support;

notwithstanding a practice which they universally adopted, of killing every second calf, on account of the want of winter keep. To such an extent did this calamity at times amount, that, in the spring of 1807, there died in the parish of Kildonan alone, TWO HUNDRED COWS, FIVE HUNDRED head of cattle, and more than TWO HUNDRED small horses.

As soon as the works, undertaken under the direction of the parliamentary commissioners, opened a prospect of removing successfully the obstacles which stood in the way of the improvements of the people, steps were taken to new model and arrange these extensive possessions. The utmost caution and deliberation was used in doing so, and plans were never more maturely weighed, nor executed with more anxiety and tenderness. To aid the further arrangement of these matters, application was made to William Young, Esq. of Inverugie, in the county of Elgin, whose active mind, and indefatigable industry, had been exhibited in what he had done upon his own estate. This gentleman superintended the commencement of those

vast improvements which were undertaken on the estate of SUTHERLAND. The success of the measures carried into effect under his direction, combined with the difficulties he had to contend with, must always be the best proof of the ability and indefatigable zeal with which he executed the charge of which he had taken the direction, and which he performed so much to his own credit and the advantage of the country. It is only doing justice to his merits to say, that the rapidity of the earlier improvements was owing in a principal degree to the impulse and action inspired by his intelligent and enterprising mind. Mr. Young resigned his superintendance in 1816, when the local management of the estate of SUTHERLAND was entrusted to the present factor, Mr. Francis Suther, whose good temper and judicious conduct in the immediate management at Trentham, recommended him to the situation he now holds. These expectations have been fully justified by the manner he has executed the details of the late arrangements, in which he received the most cordial and able assistance from Captain

John Mackay, late of the 26th foot, the factor of Strathnaver, and from Lieutenant George Gunn, of the Royal Marines, Chief of the clan Gunn, factor of Assynt.

These gentlemen deserve equal credit for the manner in which they have enforced and promoted the plans which were laid down for the extension of the fisheries and the cultivation of the coast side, as for their kind and careful conduct towards the people. Mr. Suther's exertions in promoting and carrying into effect, every arrangement which was made for the encouragement and the success of the fishing station and village of Helmsdale, requires particular commendation.

It is well known that the borders of the two kingdoms were inhabited by a numerous population, who, in their pursuits, manners, and general structure of society, bore a considerable resemblance to that which existed in the Highlands of Scotland. When the union of the crowns, and those subsequent transactions which arose out of that event, rendered the maintenance of that irregular population not only unnecessary,

but a burden to the proprietor to whom the land belonged, the people were removed, and the mountains were covered with sheep. So that it had been for a length of time proved by the experience of the stock farmers of those mountain tracts, which comprise the northern districts of England, and the southern parts of Scotland, that such situations were peculiarly suited for the maintenance of this species of stock. Taking this example as their guide, experience had still further proved, that the central and western Highlands of Scotland were equally well calculated for the same end.

Reasoning from this success, and observing that the climate of SUTHERLAND, owing to its vicinity to the ocean, and to its being considerably intersected by arms of the sea, was much more moderate than this latter district, it was fairly concluded that this county was even better fitted for this system of management, than the Heights of Perthshire, and Invernesshire. The inferior elevation of its mountains, contributed still further to this effect, and held out

every encouragement to adopt the same course which had been pursued with such success in both parts of the kingdom.

The succession of those Alpine plants, which are common to the Cheviot hills, when they are put under sheep, being also the natural herbage of the mountains of SUTHERLAND, renders them still more suitable to this mode of occupation.

On the first melting of the snow, the cotton grass is found to have been growing rapidly; it forms a healthy and an abundant food for sheep, until about the beginning of May, at which time it is in seed; when, after a short interval, the deer hair takes its place, starting up almost instantaneously, and forming, in the course of one week, (if the ground has been recently burnt, and the weather be favourable,) a green cover to the mountains. This plant grows with several varieties of bents, until the end of July, when the cotton grass again begins to spring, and with the pry moss, comes a second time into flower, in September, after which, the heather and more heating plants continue until the frosts of winter. Nor is there any part of these mountains, over

which the sheep cannot roam with ease, in search of food, rendering the whole available and profitable.

As there was every reason therefore for concluding, that the mountainous parts of the estate, and indeed, of the county of SUTHERLAND, were as much calculated for the maintenance of stock as they were unfit for the habitation of man, there could be no doubt as to the propriety of converting them into sheep walks, *provided* the people could be at the same time, settled in situations, where, by the exercise of their honest industry, they could obtain a decent livelihood, and add to the general mass of national wealth, and where they should not be exposed to the recurrence of those privations, which so frequently and so terribly afflicted them, when situated among the mountains. It was a matter of important consideration, to determine how this was to be accomplished. The local peculiarities of the county presented none of those advantages in disposing of, and absorbing the surplus population, which the borders of the two kingdoms, and the southern and eastern highlands had enjoyed. Besides, it had

made no approximation to the state in which the rest of Scotland was placed, when those changes were carried into effect. It had stood still in the midst of that career of improvement which had so remarkably and so splendidly distinguished the rest of the kingdom; and remained separated by its habits, prejudices, and language, from all around.

It had long been known, that the coast of SUTHERLAND abounded with many different kinds of fish, not only sufficient for the consumption of the country, but affording also, a supply *to any extent*, for more distant markets or for exportation, when cured and salted.* Besides the regular and

* The following extracts from Sir Robert Gordon's history of the Earldom of SUTHERLAND, which was written in 1630, will show how long this source of wealth has been fully known, and how little change the country and its inhabitants had undergone, from that period up to the other day. He says, "the country is "fitter for pasturage and store, than for cornes, by rea- "son there is little manured land there. The principal "commodities of Strathnaver, are cattle and fishing, "not only salmond, (whereof they have great store) but "also, they have such abundance of all other kynd "of fishes in the ocean, that they apprehend great num- "bers of all sorts at their verie doores; yea, in the

continual supply of white fish, with which the shores thus abound, the coast of SUTHERLAND is annually visited by one of those vast shoals of herrings, which frequent the coast of Scotland. It seemed as if it had been pointed out by Nature, that the system for this remote district, in order that it might bear its suitable importance in contributing its share to the general stock of the country, was, to convert the mountainous districts into sheep-walks, and to remove the inhabitants to the coast, or to the valleys near the sea.

" winter seasone, among the rocks, without much trou-
" ble, they take and apprehend every day so much fish
" onlie, as will suffice them for the tyme, and doe care
" for no great provision or store." He adds, " if the
" inhabitants were industrious they might gane much by
" these fishes, but the people of that country are so far
" naturallie given to idleness, that they cannot applie
" themselves to labour, *which they esteem a disparage-*
" *ment and derogation unto their gentilitie.* There is no
" doubt bot that country might be much bettered by
" laborious and painfull inhabitants." Though these observations are applied by Sir Robert Gordon exclusively to the inhabitants of STRATHNAVER, yet they are equally true as to the whole county, except that the people of the Moray Frith never made an exertion of any sort, to avail themselves of those supplies, which the ocean conveyed to their very doors.

It will be seen, that the object to be obtained by this arrangement, was two-fold: it was, in the first place, to render this mountainous district contributory, as far as it was possible, to the general wealth and industry of the country, and in the manner most suitable to its situation and peculiar circumstances. This was to be effected by making it produce a large supply of wool, for the staple manufactory of England. While, at the same time, it should support as numerous, and a far more laborious and useful population, than it hitherto had done at home: and, in the second place, to convert the inhabitants of those districts to the habits of regular and continued industry, and to enable them to bring to market a very considerable surplus quantity of provisions, for the supply of the large towns in the southern parts of the island, or for the purpose of exportation.

A policy well calculated to raise the importance, and increase the happiness of the individuals themselves, who were the objects of the change, to benefit those to whom these extensive, but hitherto unproductive possessions belonged, and to

promote the general prosperity of the nation. Such was the system which was adopted. In carrying it into effect, every care was taken to explain the object proposed to be accomplished, to those who were to be removed, and to point out to them, the ultimate advantages that would necessarily accrue to them, from their completion.

These communications were made to the people, by the factor personally, or by written statements, communicated to them by the ground officers. That nothing might be omitted in this respect, the different ministers, and the principal tacksmen connected with the districts which were to be newly arranged, were written to, explaining to them, fully and explicitly, the intentions of the proprietors in adopting them. It was particularly requested of these gentlemen, that they would impress upon the minds of the people, the propriety of agreeing to them, and of explaining, that the motives which dictated this step, arose out of a real regard for their interests and prosperity, as well as for the general improvement of the estate.

It was distinctly admitted, that it was not to be expected, that the people should be immediately reconciled to them. Such was to expect more than it was possible to hope for. But it was represented, that if this was so fully felt, and so clearly admitted, that the landlords must have been strongly and conscientiously impressed with the necessity and propriety of the measures adopted, as tending directly to the happiness of those placed under their protection. These representations had the desired effect, and nothing can be more praise-worthy, or deserve more to be applauded, than the conduct of the people on quitting their original habitations: for although they left them with much regret, they did so in the most quiet, orderly, and peaceable manner.

If, upon one occasion, in the earlier years of these arrangements, a momentary feeling of a contrary nature was exhibited, it arose entirely from the misconduct of persons whose duty it was to have recommended and enforced obedience to the laws, in place of infusing into the minds of the people, feelings of a contrary descrip-

tion. As soon, however, as the interference of these persons was withdrawn, the poor people returned to their usual state of quietness and repose. All the statements, giving a different account of their conduct, are absolutely false, and a libel upon their good conduct and peaceable character.

These arrangements commenced in 1807, and have been carried on from that period, as the different tacks expired, and afforded an opportunity of doing so. Bad years, and the failure of crops continuing to produce the same miserable effects they had constantly occasioned to that portion of the population, which still continued to reside among the mountains. This calamity fell with great severity upon them in the seasons of 1812—13, and 1816—17.

During the latter period, they suffered the extremes of want and of human misery, notwithstanding every aid that could be given to them, through the bounty of their landlords. Their wretchedness was so great, that after pawning every thing they were possessed of, to the fishermen on the coast, such as had no cattle were reduced to come down from the hills in

hundreds, for the purpose of gathering cockles on the shore. Those who lived in the more remote situations of the country, were obliged to subsist upon broth made of nettles, thickened with a little oat-meal. Those who had cattle had recourse to the still more wretched expedient of bleeding them, and mixing the blood with oat-meal, which they afterwards cut into slices and fried. Those who had a little money came down and slept all night upon the beach, in order to watch the boats returning from the fishing, that they might be in time to obtain a part of what had been caught.

In order to alleviate this misery, every exertion was made by Lord Stafford. To those who had cattle he advanced money to the amount of above THREE THOUSAND POUNDS.

To supply those who had no cattle, he sent meal into the country to the amount of nearly NINE THOUSAND POUNDS. Besides which, Lady STAFFORD distributed money to each parish on the estate: in order that no pains nor consideration might be wanting, it was arranged that the gentleman who is at the head of his Lordship's affairs,

the writer of this statement, should go to Dunrobin to settle with the local management and the clergymen, what was the best and most effectual way of distributing his Lordship's relief.* Similar means were taken by Lord REAY, to alleviate the distresses of his people. While such was the distress of those who still remained among the hills, *it was hardly felt by those who had been settled upon the coast.* Their new occupation, as fishermen, rendered them not only independent of that which produced the misery of their neighbours, but enabled them at the same time, in some degree, to become contributors towards their support, both by the fish they were able to sell to them, and also by the regular payment of their rents. While it need hardly be stated, that

* The consequence of this accumulated distress was, that a very bad Typhus Fever prevailed in Strathnaver in 1818 and 1819. As soon as this circumstance was known, every pains possible were taken by the proprietors to arrest its progress, and prevent the contagion spreading. Directions, besides, were given to send from Apothecaries' hall three large parcels of Peruvian bark and calomel, which was thankfully received by the people, and tended to check the disease and restrain its ravages.

these wretched sufferers not only required to be relieved, but failed entirely in the payment of what they owed the landlord.

If any doubt had remained of the propriety of the system which had been adopted, the experience of this year certainly put that doubt to rest. There could be no hesitation, therefore, on the part of those at the head of the management, strongly to advise, that that system which, in its result, was so completely successful, should not merely be continued, but that it should be extended. But even if these motives had not been sufficient to recommend this line of conduct, others which occurred, while considering the plan to be adopted for the relief of these poor people, came in aid of the same conclusion.

It was found in this instance, as on every former occasion, that the tacksmen expected that their sub-tenants should, in the relief which they were to receive, be put upon an equal footing with those holding immediately of the landlord. Upon examining the lists, however, it was found that this class of persons had been encreased

to a great extent, and that *entirely for the benefit of the tacksmen.* It did seem, therefore, only consistent with justice, that those who were benefited by their services in years of plenty, should be the persons to assist them whenever such a calamity as that which then prevailed should occur: without some such rule, the evil of subtenancy would have gone on encreasing, and notwithstanding the exertions of the landlord to the contrary, and to such an extent that the estate would have been soon weighed down with an over population, more wretched than even that which it had been their endeavour of late years to remove and improve. It was, therefore, determined that no sub-tenant could be relieved, unless he could produce the security of his immediate superior for the repayment of what he obtained. This regulation had an excellent and wholesome effect, both in limiting the immediate demands of this class, and of inducing the tacksmen to consider how far it would be for their advantage, for the future, to continue in the practice of so ruinous and impolitick a system.

For the purpose of regulating the distribution of his Lordship's charity, and in order to secure as far as possible against every sort of imposition, a price was necessarily fixed at which the meal which was imported for their relief should be sold, being less for ready money than when credit was given. If this precaution had not been taken, even those who were able to have purchased it would have come forward and claimed it as a bounty; of those who did get it on credit, few were ever able to repay it, and the great proportion of the price has since been abandoned.

Even after every arrangement had been made for the relief of the tenants and sub-tenants upon the estate, a third set most unexpectedly appeared. Upon examining accurately the names of those claiming relief, with the rentals and other lists, it appeared that a very numerous body had fixed themselves in the more remote districts of the estate, and on the outskirts of the more distant towns, who held neither of landlord nor of any of the tacksmen; and who, in short, enjoyed the benefit of residing upon the property with-

out paying *any rent whatever*. Their numbers amounted to no less than FOUR HUNDRED AND EIGHT FAMILIES, consisting of nearly TWO THOUSAND individuals. Common humanity, as well as a compliance with Lord Stafford's directions, made it necessary to extend his relief to such of these people as stood in need of it. But this fact having been once discovered, it certainly would have been most unreasonable to expect that steps should not have been taken to remedy this evil, by removing the whole of these people to the coast, and by adopting such rules as would prevent, in future, the settlement of a similar class upon the property.

The immediate necessities of the people being provided for, it now became necessary to carry those ulteriour arrangements into effect, which were necessary to prevent the recurrence of so much misery and wretchedness. It happened that the tacks of a large portion of the estate expired at the respective terms of Whitsunday, 1818, 1819, and 1820. The question then for consideration was, whether it would be better to remove a certain portion of the

people during each of those three years, and some of the following years respectively, giving them the short notice common on such occasions; or whether it would be better to postpone the whole till the years 1819, and 1820, giving them all immediate notice of the arrangement proposed. In favour of the former plan nothing could be urged, but that it might be easier to remove a less number each year than a greater number. But on the other hand, as the lots proposed to receive them were all ready to be pointed out, no further arrangement on that head was required. The reasons for preferring this latter course were many, and by adopting it, both the interests of the people and that of the landlord were more fully consulted. As long as the people remained in the hills, in the fear of being removed, their habits would necessarily have become more desultory and less industrious than they even naturally were. Nor was it possible, to expect from people so situated, the punctual payment of their rents, and nothing could be more certain than that they would take every advantage of the land

of which they knew they were not long to continue to be the occupiers. It must be obvious that this plan being determined on, it was desirable that its execution should be simultaneous, as well as not too long delayed, from the circumstance, that until a considerable portion of the interior was newly arranged, there could be no hope of letting it on any terms to a stock farmer. The necessity of completing it as speedily as possible was called for also, in consequence of the serious and extensive losses experienced by the stock-farmers: amounting in each year to many hundred sheep. By them these losses were invariably and without exception ascribed to the depredations of the Highlanders, and there can be no doubt that they suffered much from this cause. But as long as the arrangement was incomplete, and any of the great stock farms remained intermixed with, or flanked by, any of the people, it afforded so ready an excuse to screen the negligence or cover the knavery of the shepherds, that there seems every reason to believe that there was much ascribed by the stock farmers

to the thefts of the natives, which really belonged to the misconduct of their servants. But from whichever of these causes the losses proceeded, or in whatever proportion they arose from both; the necessity of checking them, and the means of accomplishing this were the same. For until every cause of complaint was removed, it was impossible for the stock farmer to make his shepherds responsible for the number of sheep committed to their charge. In support of these remarks, there will be found inserted in the Appendix, the last report made by the SUTHERLAND association for the protection of property, upon the state of the flocks in that county. From this document, it will be seen how serious the losses were, while the mountains remained occupied by people who surrounded the sheep farms in every direction; and how regularly and rapidly they have decreased as the arrangements were from time to time completed.

It was determined therefore, that the whole of the removals should be completed in the month of May, of the years 1819 and 1820, respectively, and notice to

that effect was given, so far back as in the autumn of 1817. In order to give the people who were to be removed, every advantage, and for the purpose of securing to each of them such a sum of money, as might enable them to purchase a boat, or a share in one, and to proceed, without difficulty, in the erection of their new houses, and in the cultivation of their new lots, it was directed that the whole of the arrears due by them, whether on account of meal, or on account of rents, should be abandoned, and that *they should hold their farms, during the last year of their occupation, rent free,* on condition of their settling in their new lots, with alacrity and without delay. For the purpose of still farther increasing this sort of stock purse it was ordered that the moss fir belonging to their huts, should be purchased from them at a price to be fixed by two sworn appraisers. According to the custom of the country, this fir is the property of the tenants, and they carry it along with them from place to place, as they remove their house from one situation to another. In the present instance however, in consequence of the remote situation in

which many of these huts were placed, it would have been impossible for them to have carried it off, or at least by doing so much time and labour would have been lost to the people, and much damage and inconvenience would have been experienced by the stock farmer.* To relieve them

* The mention of the word timber, may probably mislead those who never saw a Highland hut. To obviate this, it is proper to explain, that nothing conveys a more inaccurate idea of the reality than this word does, when applied to the wooden materials used in the construction of one of those dwellings. The principal part of this timber consists of the couples which support the roof. These are composed of birch trees, of from seven to ten feet in length, and about four to six inches in diameter. They are fixed in the ground at one end, and at the other they are secured to each other, being rudely but ingeniously fastened together by wooden pins. They are left rough as they come from the forest. The construction here described, is exactly similar to that followed in the old half timbered houses of England. In neither case do the walls support the roof. The height of those huts is so inconsiderable, that they are often mistaken for a portion of the mountain side. These couples are the most valuable part of the timber employed in the construction of the hut. They are obtained from the woods of the proprietor, and continue his property. The moss fir, which is dug by the people from the peat bogs, and which, on this account is reckoned to belong to them, is placed lengthways from couple to couple, to support the turf

rom this hardship, was the object secured by this further extension of relief. But in addition to this, new timber was imported and furnished gratis to all such as settled upon their new lots, within a period fixed upon. The amount thus given up, and expended in these various ways upon the whole of these arrangements, exceeds the sum of FIFTEEN THOUSAND POUNDS.

It was hoped, and no pains were spared in order to induce the people to employ the twelve months, during which they held their land rent-free, in preparing for their removal by constructing their new houses, and taking other steps for the removal of their families and their property.

No exertion however, nor entreaty, could persuade them to do so, and they obstinately adhered to the resolution of taking no steps to prepare for this change. The factor again and again met them, upon the lots, giving each of them the choice of his

covering. They are composed of small pieces of wood, averaging little more than a yard in length, and from one inch to two inches in diameter. The new wood given to them by Lord Stafford, it is needless to say, was of a different quality.

situation. Of these, a great number put down their names, but they took no further steps to cultivate their new land. In this they were encouraged by those who expected, that if they could get the people to hold out to the last, they would force their landlords to abandon their arrangements; thus, as is always the case with such advisers, sacrificing the interest of the people, to their own selfish purposes. To this observation, however, there are two exceptions that ought to be mentioned. The one is that of the people of Dunviden, and of other towns in the heights of Strathnaver, who, in order to facilitate a particular arrangement, agreed to quit their places in May, 1818, and settled in their new lots at Strathy, with the utmost cheerfulness. They were rewarded for this conduct, by obtaining a present of their seed corn. The other instance is, that of the people of the Kirktown of Kildonan, many of whom began building their new houses at Helmsdale, during the year 1819, previous to their removal in May, 1820, by which time they were all settled in their new habitations.

In consequence of abandoning a large arrear of rent, the surrender of the tack of an extensive farm in Strathnaver was obtained, the greatest scene of subtenancy on the estate. This afforded the means of completing these improvements, on a greater scale than could otherwise have been adopted, by extending the terms already mentioned to a great body of subtenants, who otherwise would have been reduced to the greatest state of want. For it must be remarked, that whatever benefits were afforded to those holding immediately of the landlord, it was very rare that any advantage of a similar nature was extended by the middlemen, to those who held of them as undertenants. This was the case, it is feared, in several instances, in spite of all the exertions which were made to prevent it.

Notwithstanding this dilatoriness in occupying their new lots, by far the greater bulk of the people are now settled upon the coast, and adopting with zeal and alacrity, the cultivation of their land, and the prosecution of the herring fishery. In nine cases only was it necessary to enforce the law in re-

moving the people, and out of these, five consisted merely in taking out a portion of the furniture which the people had left behind them. So minutely and carefully were the proceedings conducted, that a memorandum was made of each case by the Procurator Fiscal, who is the public prosecutor of the county, at the time of each removal, of the state and condition of each cottage. To these minutes, reference may be had as occasion may require, and they serve as the most complete and thorough refutation of all the falsehoods and calumnies, which have been propagated regarding these transactions.

Some of the people, however, in 1819, were impressed with the notion that if they resumed possession of their holdings, they would be enabled to retain them for another year, and that something might happen during that period, to prevent the arrangements taking effect. In this view, they retired upon the approach of the sheriff's officers, taking with them all their goods; but as soon as the constables left the glen, they re-appeared, and constructed new, or repaired their old turf huts, and

re-occupied their former possessions. This, was done in no offensive manner towards the factor.

It however rendered a second ejectment necessary, a measure distressing to the people themselves, but in which they acquiesced with the same good temper and obedience, as they had done in the first instance. It further made it necessary for the local management to adopt some measure to prevent the possibility of its repetition, and to prevent it taking place at all in other cases; this was to be accomplished either by removing, or by destroying the timber.

The remote and inaccessible situation of the huts, rendering it impossible for the people to remove the timber at all, or at an expense far exceeding its value, was, as has already been stated, one of the causes which induced Lord STAFFORD to become the purchaser of it. The same reason also, necessarily prevented those who had to carry the arrangement into execution from effecting this. The streams were too small, to admit of floating it down to the coast; and in many instances,

it was placed at too great a distance from their course, even if this had been practicable, and carts could not be brought within miles of these habitations.

In the exercise of their discretion, the local management adopted the only course which could be pursued, — that was, to collect and burn it. The fact is, moreover, that much of the timber which was destroyed in this manner, was done by the stock farmers themselves, after they had got possession of the lands, and were in the occupation of the farms. This simple and necessary act, arising out of the peculiar circumstances of the moment, and equally required for the sake of the people, and that of the stock farmer, and executed without the knowledge of Lord and Lady Stafford, has been falsified in every possible way, by the members of that self-constituted society, whose motives and conduct have, more than once, been already alluded to. The most positive and direct denial is given to every account in which it has been attempted to apply to these proceedings the character of cruelty and oppression, arising either from a premeditated

plan, or from the inadvertence of the moment. To those who are acquainted with Mr. Suther, it will appear that more has been said than is required to show that this is the fact; to them the mildness of his character, and the kindness of his manner and disposition, is a complete refutation of the misrepresentations circulated on this point. These qualities made him popular with every person he had to do with at Trentham; it was on account of them that he was selected to carry those delicate arrangements into effect, and in exercising which he has secured the good will of every man in SUTHERLAND. The excellent manner in which he has conducted the removals in 1820, is no mean proof of these qualifications; for it must have required much good temper and management on his part, as well as forbearance and good sense on the part of the people, to execute, so gently as never to be known, removals during the course of last month nearly as extensive as those carried into effect in May, 1819. Regard being had to the active endeavours which were taken to inflame and mislead the people during the last year, and to the

lamented examples which others set them in their immediate neighbourhood. Equal praise is due to Captain Mackay and Mr. Gunn, for the manner in which they have executed what has been entrusted to them.

Wherever it was possible to carry off the timber with ease, it was not purchased, but left to the tenants in the usual way. Such was the case in the parish of Loth. Yet, so determined were the propagators of these falsehoods to misrepresent every fact, that they asserted that every house in this parish had been destroyed by fire. A statement equally without foundation and malicious. In a stranger, such a mistake would have been more pardonable. For, owing to every highland hut being completely blackened with soot, from the custom of making the smoke circulate through the interior of the structure, it presents, when unroofed, an appearance which might, without difficulty, be mistaken for the effect of fire produced by conflagration. The relators of those mistatements had, however, no such apology to plead in their justification, and they must have known, that what they stated, was untrue.

In the course of the arrangements, several of the more respectable of the people and inferior tacksmen of STRATHNAVER, who had realised considerable sums in consequence of the bounty which was extended to them, stated to Mr. SUTHER, the factor, that they were in terms for tacks of small cattle farms in CAITHNESS, which they would prefer, as more congenial to their former habits, if he would grant them the same allowance, if they took these lands, as were offered to them if they settled upon the estate. Mr. SUTHER readily agreed to their request. This he did, because the respectability of these people made such an acquiescence in their wishes proper in itself, and because they were the least fit to become cotters. It will, however, be curious to watch their future success and progress, and to mark whether they keep pace, in the accumulation of wealth, with those who have remained on the estate, and have been transferred to the coast. They have entered on the occupation of their new farms, under no common advantages, each having a sum of money in his possession, derived from the bounty of

their former landlord. They returned Mr. SUTHER a letter expressive of their gratitude; and they are now settled by their own choice, in that county. A similar application was made to him, by the people of WESTER ABERSCROSS, and others in STRATHFLEET. The same indulgence was shown to them, and these people are now settled upon the neighbouring property of Mr. DEMPSTER of SKIBO. From the barony of ASSYNT, a few emigrated into the adjoining parish in ROSS-SHIRE, some of whom have since petitioned Mr. GUNN, the factor for that district, for permission to return to those lots, which they had before refused, and some have actually done so.

The only emigration, if it may be so called, of any body of people, is that which has taken place from the heights of Kildonan, which is that district which lies between the valleys of the NAVER and the HELMSDALE, and forms the ridge of the county bounding with CAITHNESS. It was inhabited by a sept called the CLAN GUNN, or in Gaelic, MAC-HAMISH, meaning the son of James, the name of some of their more daring leaders. This clan, situated on the

borders of the two counties, acknowledged the supremacy of the Earls of SUTHERLAND. Placed in the verge of the two jurisdictions of the Earls of SUTHERLAND and CAITHNESS, and in a most remote and inaccessible country, they contrived to live in the committal of continued breaches of the law, and yet to escape its punishment. This character, even to a late day, distinguished in a remarkable manner, some individuals of this Clan and district, and the people of the heights of Kildonan were long noted for being the least observant of the laws of any in the county. Indeed it is only within these five years that the disappearance of a sheriff's officer, who was sent up to execute a warrant in a civil process, led to the recollection of many stories of former days. Their country was peculiarly favourable for carrying on illegal distillation, and they did not neglect to take advantage of their situation. They obtained, with much ease, their grain from the corn districts of the adjoining county of Caithness, and the inaccessible and remote situations of their habitations, made it neither very easy nor advisable, for the

revenue officers to follow them into their recesses. The nature of the country gave them equal facilities in disposing of their whiskey.

Besides these, sixteen families, who were connected with some persons in better circumstances, by whom they were assisted, embarked for America, in 1819, and about the like number have done the same this year. These families belong entirely to STRATHBRORA. If a larger emigration takes place from the county, it is not from the estate of SUTHERLAND. It will be seen from this statement, that by far the greater bulk of these people have settled on the lots marked off for them, and by far the greater proportion of those who have left the estate, are fixed on the adjoining estates and counties. There is not one who might not have remained on the estate of SUTHERLAND, if he had thought it for his interest so to do, and there is not an individual among them, whose present situation and condition is not known to the factor on the estate.

The result of these arrangements is, —

1. That the whole of the population of

Strathnaver, from Altnaharrow to Invernaver, with the exception already mentioned, have been settled on the sea-shore, extending from the mouth of the Naver to the boundary of the estate near Bighouse. They are settled as near to the various creeks, in small towns, as it was possible to arrange. These people are in general of a most excellent industrious character, and have begun to cultivate their lots with much industry. Many of them having been accustomed to the herring fishing, have with great boldness taken to catch cod and ling, under the guidance of the fishermen of Armadale and Portskerra. These latter had been removed some years previous to this period, by the former proprietor of this estate; from whom it was purchased by Lord STAFFORD in 1812. They have become as expert boatmen as any in the world. This example tempted many young men who had never been before at sea to engage, with success, in this daring occupation.

2. The people of the Strath of Kildonan, and of the other valleys connected with Strath Helmsdale, are settled on the coast,

near to the thriving village of Helsmdale: with the exception of those people who have emigrated from the heights into Caithness.

3. The people of Strathbrora, and such of those of the parish of Loth as were moved, have been fixed upon the lots in the vicinity of Brora, where a harbour with every convenience for carrying on an extensive fishery had been constructed. From its vicinity, besides, to the coal and salt works, and being in the centre of the great agricultural improvements, these people have the means of constant and immediate employment, whether they become fishermen or not.

4. In Assynt the lots for the removed people have been placed along the shores between Rhu-store, and Loch Inver, amidst a population brought up to fishing, within the last fifteen years, and in one of the best situations for the prosecution of that occupation, in the west Highlands of Scotland. This extensive barony, has, with the exception of the small district of Knockin and Elphin, been arranged.

Of the people who have been moved,

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some few, who preferred larger lots, have been fixed upon Dornoch Muirs, a most extensive district, consisting of many hundred acres, well suited both in situation and aspect, as well as in every other respect for improvement and cultivation, and which displays the commencement of an industry which will soon convert the whole of it into cultivated land. In 1811, but a small progress was made in this respect, but it has gone on increasing from year to year ever since; and it will be a curious circumstance, to be able hereafter, to refer to the exact period when the improvement commenced, and when all traces of its original state is nearly obliterated. A more beneficial situation for cotters is not to be found. In every respect it is superior to the Muirs of Aberdeenshire, the Mearns. The scenes of such industrious and laborious exertion.

From the foregoing enumeration, it will be seen, that the only hilly districts which are still occupied, in some degree, according to the old system, are the small farm of Knockin and Elphin in Assynt, the district near Lairg, the lower part of Strath-

fleet, and the district round the Kirk of Rogart.

One important alteration, however, has been made in the mode of occupying these lands, the tenants all hold immediately of the landlord; their lots are regularly laid together, to which is attached a hill pasture of a definite extent; they are no longer bound conjointly and severally for the payment of their rents, but each is answerable for his own. The industrious man need not, therefore, fear to be called upon to pay the rent of his idle neighbour, and he who is disinclined to work, now finds that he has no alternative between exerting himself or losing his land.

They are bound to erect stone houses, and these must be placed in the view of the roads near which they are situated, so that they will not only be constantly under the eye of the local management, but will gradually acquire industrious habits from their being placed near the great lines of communication through the county. This arrangement will also prevent the erection of those wretched huts under which that numerous population started up,

which has been already described as paying rent to no one. How far upon the general expiration of the tacks in 1828 a new arrangement of a portion of these people may be necessary, will require much deliberation, and the consideration of many circumstances. Every thing will depend upon the conduct of the people and how they will be able to support themselves until that period; but as these districts are situated in a lower part of the estate nearer to the coast, and at the same time intersected by the great lines of road, it is expected and hoped that the modification of the general rule in their favour may prove advantageous.

When these arrangements were first commenced, it was necessary to make the lots of a larger size, with a proportional quantity of hill pasture. This was requisite, as those persons who were first settled upon the coast were entirely unacquainted with the sea, and were possessed of no boats, even if they had known how to manage them. Their lots, therefore, were made of a size sufficient for their comfortable support, without their being at all de-

pendant upon the ocean for any part of their livelihood. But as the herring fisheries encreased, not only those who were settled upon the coast, but a large proportion of the young men belonging to the hills, engaged annually in this occupation, so that they gradually became proprietors, or part proprietors, of boats. As the alterations proceeded, therefore, it was no longer necessary to make the lots upon the same scale with those originally set out. Indeed, if they had been so, one great object of the arrangement would have been entirely lost: for if the people had subsisted altogether or chiefly on their lots, they never would have gone much to sea. Or if, on the other hand, they became active fishermen, their lots must have been imperfectly cultivated. Even now, although they are of a size to induce every man to engage actively in the prosecution of the herring fishery, yet these two advantages combined, provides so completely for the maintenance of the families of the greater number of the people, that few of them have as yet been induced to engage to any great extent in the cod or ling fishery.

This observation, though applicable in some degree, to the settlers on the whole estate, is more particularly so to those established on the coasts of the Moray Frith. The size of the lots, however, is quite sufficient for the maintenance of the family, though not sufficient to admit of the young men remaining idle to the degree they were accustomed. To each lot there is still a certain portion of hill pasture attached, and in the neighbourhood of Brora, they have the right of pasturing the links; to which is to be added, some old infield land as soon as it is laid down in grass, which is now in operation, and for which they are to pay at the rate of ten shillings a head for each cow. The size of the lots upon Dornoch muir, are suited to the views and the capital of the occupier, though it is proposed not to exceed twelve acres, as the allowance to any one person. For each lot they pay one shilling a year. Tacks are granted for seven years absolutely, with a condition to continue the term for seven years more for the land which may be brought into cultivation. As a farther inducement

for the people to cultivate this district, they are allowed at the rate of FIVE POUNDS for EACH ACRE they render arable; to be paid from time to time as the land is brought into cultivation. To all these lotters lime is afforded by the landlord for two years at prime cost. The lots near Brora vary considerably in size. The generality of them, however, average about two acres each, for which they pay at the rate of 2*s.* 6*d.* an acre. These lots have been all ploughed by Lord STAFFORD, and the principal tacksmen on the estate. There are other lots upon the arable land, of one acre each, and this is the size generally adopted in the neighbourhood of Helmsdale. The rents for these last, which consist of old infield land, average about THIRTY SHILLINGS an acre, which includes the right of pasturage on the hills.

It should be added, that throughout, the Scotch acre is meant, which is one-fifth part larger than the statute acre.

Such is the situation and the extent, and such the conditions upon which land has been offered to *every individual* who was subject to the late arrangements, and which

has been accepted of, by far the greater number of them. In these lots, by industry and activity, they will not only be enabled to bring up their families in decent comfort, but they will be entirely free from those occasional and frequent attacks of overwhelming misery, to which they were formerly subject.

The REAY country, which had been arranged in the same manner as the estate of SUTHERLAND, was most judiciously done by Lord REAY, and with equal success. The whole of the interior of that property has been let in seven great sheep farms, occupied by two south country and five native stock farmers. The people have been settled on the shores, near the mouths of some of the noble sea water lochs, with which Lord REAY's estate is intersected. In this particular, his lordship possesses a vast advantage over the Marquess and Marchioness of STAFFORD, whose estate, except in ASSYNT, does not possess one good natural harbour. At the same time, it is a curious fact, that fishermen have seldom established themselves upon the shores of a protected bay or inlet,

but generally upon the exposed coast of the ocean. The reason of this appears to be, that the former situations are too far removed from the fishing grounds. And the vicinity of the land, and the set of the tides, makes it a tedious and difficult matter to make for such ports. The sooner they are fairly launched into the ocean the better, and it is of little consequence whether the exposure is more or less bleak. The saving of time and labour, in getting to and from the fishing ground is the first consideration. These harbours are, however, of great consequence during the herring fishery, as they afford safe roadsteads for the busses to lie in, when they come off the coast to catch and cure the fish. This mode of disposing of the herrings, saves all the expense of buildings and large houses, which is rendered necessary on the east coast, by the want of ports. Lord Reay's lots are situated at Scourie, and near the mouth of Loch Inchard on the west coast, and at the mouth of Loch Eribol, and at Skerrow, near Rabbit Island on the north coast.

The same arrangement was in every

respect, adopted by his Lordship, in regard to the people on his estate, as has been pursued upon the estate of SUTHERLAND. He gave to each lotter two Scotch acres of arable land, with a proportional extent of hill pasture. They receive however, no other allowance whatever, nor did they require any. The arrangements were completed without any complaint on the part of the people, or unmerited and ungrateful attack on the part of persons who had, in the capacity of middlemen, or of discharged soldiers, and pensioners, to lament over the easy life they had hitherto enjoyed, or to express their dissatisfaction for unreasonable expectations not complied with. His property not having been forced into, and kept in that artificial and unnatural state, which the maintenance of the Sutherland regiment produced, in the manner already described.

The estate of Sir CHARLES Ross has been, in a similar way, completely arranged as a sheep walk, and let to two gentlemen from Northumberland; as have also those parts of the estates of Lord ASHBURTON, CADBOLL, ACHANY, BIGHOUSE, Messrs. DEMP-

STER and GILCHRIST, which are suited to this mode of occupation. In the same way, the estate of the Gruids belonging to POYNTZFIELD was let, from Whitsunday 1818, to Mr. JOHN SUTHERLAND, to be occupied as a stock farm. Mr. SUTHERLAND was formerly a tacksman on the estate of SUTHERLAND, whose lease was not renewed. He is represented to have taken an active share in assisting some members of his own family, and three other persons, in the character which they had assumed to themselves under the title of the Sutherland and Trans-atlantick Association. From the secretary and agents of which society, proceeded those unfounded calumnies and assertions, published with the intent of giving a colour to the arrangements and improvements on the estate of Sutherland, in every respect the farthest from the truth. Arrangements, it will be seen, not peculiar to that property, at least as far as the mere removal of the people supports a comparison. The population of the Gruids was considerable. It does not appear, or at least it is not known that any lots, or any other allowance whatever has been made, for those people, or that

they received any thing upon their removal which took place in the winter of 1818, and in the course of the last month.

From what has been just stated, it will be seen, that the lotters upon the estate of SUTHERLAND had advantages offered to them, which the settlers upon no other highland property ever had. This circumstance is by no means noticed in order to make any invidious comparison. On the contrary, it is brought forward merely for the purpose of remarking, that it is the firm conviction of some of the most intelligent gentlemen (highland improvers) not connected with the county of SUTHERLAND, or any of its proprietors, as well as of some gentlemen in other parts of Scotland, best fitted to judge of such matters, that much of the disquiet which was supposed to have been produced in 1819, arose from this circumstance, thereby enabling the agitators to persuade the people, that where so much had been done for them, they had only to show an unwillingness to comply with what was proposed, and they would easily obtain more. This reasoning, however,

proceeds upon the assumption of the truth of the stories, that the people did show some such symptom of resistance; which is not the fact, and except being guilty of the folly of believing those who told them, that they would obtain money, by attending the meetings at the MICKLE FERRY, they never for one moment, exhibited any symptom of opposing the projected arrangements.

An advantage of no ordinary nature will be obtained, by this concentration of the population upon the coast; which is, that the benefits of education and moral instruction can now be extended to all, which formerly could only be obtained by a portion; notwithstanding every assistance was given by Lord and Lady STAFFORD, in order to facilitate the praise-worthy views of the Scottish Society for propagating Christian knowledge, the object of this society being, the extension of the advantages of instruction to those whom the benefits of the parochial schools could not reach. These arrangements will also be attended with this additional advantage; namely, the destruction of the smuggling trade, which continued to exist among the

mountains, in spite of all the laws that were passed to check the evil. The extent to which this illegal trade was carried on was very great, to the serious and direct injury of the revenue. The effect of it, however, upon the habits and morals of the people, was a matter of much more serious importance. It nursed them up in every species of deceit and idleness, by which they contracted habits and ideas, quite incompatible with the customs of regular society, and civilised life, adding greatly to those defects, which characterise persons living in a loose and unformed state of society. A want of openness and candour, with an ignorance of the true value of these virtues, has always been remarked to exist among rude nations, and the prevalence of these desultory habits, served to bring these characteristick qualifications into the utmost activity, and indeed, rendered them necessary. Living in this respect, in the continued breach and defiance of the laws, it was difficult to convince them that they were, in other particulars, subject to their operation. And up to the latest date, the power and influence

of the Chief was so much more regarded than that of the law, that it was the common practice to commit the execution of legal warrants, to the factor on the estate. Among other bad consequences, arising out of this practice, was, that when the sheriff was called upon to decide in any dispute which might have arisen betwixt landlord and tenant, and the judgement happened to be against the latter, the conviction in his mind was, that it was the power of the landlord, not the justice of his case, that obtained the decision. This practice has only lately been altogether put an end to, and all legal warrants are now executed in the regular manner.

The principal rivers are of considerable value as salmon fishings, and have been let at a proportional rent, to Berwick fish salesmen. In order to protect this property, and to preserve the breed of this valuable fish, strict orders were given to prevent the rivers being poached upon at any time, but especially during the close season. It was difficult to convince the people that such a regulation was meant to be effectual; for the habits al-

ready described rendered such a pursuit one of their chief employments, and the checking it almost appeared to them to be interfering with a vested right.

In another instance of the same sort, the same feelings have prevailed. The shores of the little ferry produce muscles of an excellent quality, and their use as a bait to catch cod is well known. The people from Moray come across the frith to apply them to this purpose. The scalps were placed under the protection of the ground officer of Dornoch, who did not very strictly enforce the orders he received in that behalf. But as the home fisheries increased, and became an object of encouragement, it became necessary to protect effectually, that which was required for their success. The muscle scalps are now carefully preserved; though it has given rise to much discontent and clamour on the part of those who disapprove of all improvements, and who think it a better thing to have an idle population depending on a precarious supply of shell fish for part of their food, than an industrious set of fishermen drawing a regular and

constant means of subsistence from their industry and labour.

In the same way, the natural woods upon the estate were plundered and destroyed. In place of every glen supplying a sufficient quantity for the purposes of the estate, the whole county was literally denuded. Similar regulations were given for their preservation; and of late years they are rising again in every direction. What is singular, and worthy of remark is, that the growth of these natural birch plantations, and the occupations of the grounds by sheep, accord in a remarkable manner. The situation in which these woods naturally flourish, are those districts which are appropriated to the winter keep of the sheep. The consequence of this is, that the young trees shoot up vigorously during the summer months; and by the time the sheep are turned into these pastures, they have lost their leaves, and the shoots have either got beyond the reach of their bite, or the bark has become so strong and bitter, as to prevent the sheep feeding upon them. The growth of these plantations are peculiarly favourable to the protection

of these winterings. Thus increasing their capacity for maintaining stock, by affording the most complete and perfect shelter for the sheep, from the inclemency of the storms of wind and snow. In an equal degree are they subservient to the extension and successful prosecution of the herring-fishery. The thinnings afford the best materials for smoking red herrings, while the tree itself forms staves for the barrels: and such pieces as are unfit from their crookedness to be thus applied, are used as knees for the construction of the boats. In no way whatever, could an arrangement have been thought of or adopted, which, in its effect, would to such an extent have called forth the whole resources of the country, and in a way that each should assist the other as this does. By one simultaneous arrangement the people are placed beyond the reach of want — the growth of the natural woods supplies them with materials for the construction of the boats, by means of which they are to earn their livelihood — the timber when arrived at maturity, equally supplies, upon the spot, the means of curing the fish when caught,

and of carrying them to market — while during its growth it is at the same moment nurtured by the application of the land to stock farming, and in return increases the capabilities of the estate for rearing, and maintaining, an additional supply of food, derived from that source, and of raw material for the support and employment of the English manufacturer. This is the system which a few interested and malignant persons have attempted, for selfish, or pecuniary, or still worse motives, to revile, and that which has brought blessings and happiness upon thousands, and which has conferred upon them comforts they never before enjoyed, and of which they must have for ever continued ignorant, if it had not been for the steady and praiseworthy perseverance of the owners, of this extensive and important property, in common with the other proprietors of Highland estates.

The progress which the earlier settlers have made in the cultivation and improvement of their lots, and in the construction of their houses, is very striking, and of the most satisfactory nature. In some in-

stances they were obliged to be contented at the outset with huts, somewhat similar to those they had before been accustomed to; but these were in a short time replaced by a strong well-built stone cottage. The shape and appearance is, no doubt, far inferior to the habitations of the poor of the more southern districts of Scotland. They are, however, warm and comfortable, and afford many conveniences over the ancient hovels of the country. The byre no longer forms part of the same habitation, nor are the pigs permitted to occupy the same apartments with the family.

The rearing of this animal has become an object of great importance, there being a considerable exportation of them, and in many instances the people have overcome the prejudice which they entertained against the use of this food.

The unshapeliness in the appearance of the new cottages, is owing very much to the coarseness of the materials which it is necessary to employ in their construction, as the county is, except in particular places, very deficient in good building materials. In the vicinity of Brora, where there are ex-

tensive quarries of fine white free-stone, houses have been erected, by some of the people, which will vie in their appearance, with the best cottages of any country. In order to encourage the people in building neat cottages, Lady STAFFORD offered premiums of TEN POUNDS, FIVE POUNDS, FIFTY SHILLINGS, and ONE POUND, to those who should build the FOUR best cottages during the year 1819, besides some inferior premiums. These have had the best effect, and her Ladyship has been pleased to renew the same for the ensuing season.

The improved cultivation of the lots by the cotters is equally remarkable, and the quantity of waste land, taken in by them from the face of the mountains, is very great. At Port Gower, all the lots are now in full cultivation, with the exception of one only, which is nearly completed. At Gartymore, near Wester Helmsdale, the industry of the people has brought into cultivation much land hitherto waste and covered with heath, bearing good crops of bear and turnips. The same has taken place at Wester Helmsdale; but there they enjoyed con-

siderable advantages from the extent of old infield land each of them held in the first instance.

The place in this vicinity where the least progress has been made, is on the lots of Easter Helmsdale; a situation where it was expected that the progress would have been more rapid, owing to its immediate vicinity to that thriving village; and as the whole had been turned over by the Dunrobin ploughs, previous to the people being placed upon it.

The increasing wealth and prosperity of these people, has kept pace with these improvements. The surest means of judging of this fact, is, by ascertaining that portion of their gains which they are enabled to lay out in the purchase of superfluities, or of such articles as are not immediately necessary for their support. The extent to which this has increased among the coast-side settlers is very remarkable. At the last Brora fair, an institution of a few years standing, and which was held in last November, there was spent in the purchase of what in Scotland are not inaptly termed *fineries*, the sum of FIFTEEN

HUNDRED POUNDS. This sum was expended almost entirely by the settlers on the coast-side, whose alleged poverty and wretchedness, have been pleaded in such strong but false and unfounded terms, the very reverse being so much the case. The fair was attended by about FIFTY merchants, as they are called, from Golspie, Dornoch Tain, and other neighbouring towns. One of those from Golspie, and two from Tain, sold each goods to the amount of ONE HUNDRED POUNDS and upwards. The baker from Golspie, sold confectionaries to the amount of THIRTY POUNDS. It is believed, that so rapid an improvement in the circumstances of a people never before took place. Before finally leaving this subject, it may be remarked, though it is perhaps unnecessary, that excepting two instances, there is now no longer any sub-tenant upon the estate. Services and payments in kind of every description have been abolished, in lieu of which money-rents on a moderate scale have been substituted. The two exceptions to this rule, are upon two farms occupied by gentlemen who are fully alive to the

advantages of, and have completely adopted the system of sheep farming; but who are unable, for some time, completely to arrange their farms.

As a further arrangement connected with this branch of the subject, regulations have been adopted to prevent the evils which sub-tenancy, or a division of the lots would produce, by a continued and too rapid a multiplication of the numbers of the people. The natural tendency of population is to increase more quickly than the means of subsistence. This is from many circumstances more particularly the case throughout the Highlands. The particular district, now under consideration, feels the operation of some of these circumstances as powerfully as any part of the country. Being, in addition to the causes which operate elsewhere, under the influence of a powerful and solemn feeling, in favour of early marriages. A principle in every respect most praiseworthy, and which strongly upholds the moral character of a people, when the subsistence of the family is obtained through the exertion and labour of the

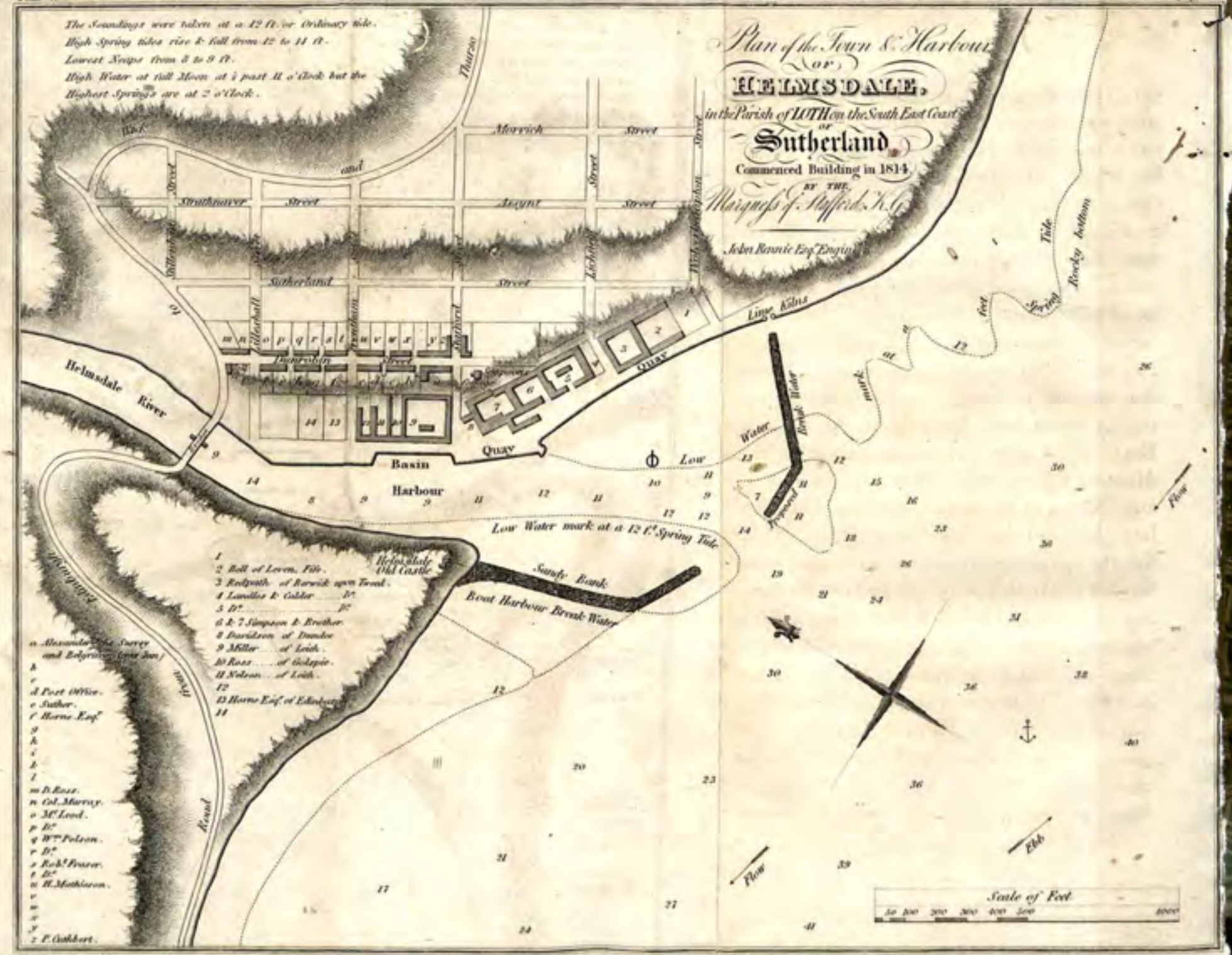
parents. But when their maintenance must be left to the gratuitous support of others, it degenerates into a selfish gratification of passion, in its consequences destroying every right and proper principle of our nature. Which must unfortunately be the case wherever the evils of a redundant population, and compulsory laws for their support exist.

The progress of the FISHERIES have even exceeded those improvements which have now been under consideration. The encouragement of the herring fishery has for several years back, been a favourite national object. The employment which it gives to a vast body of hardy fishermen, and the quantity of food it produces, renders few objects more worthy the attention and encouragement of the publick. This fishing has been long prosecuted with great success, on the west coast of Scotland. The herrings are there of a superior quality. They make their appearance generally on the west coast of SUTHERLAND, about the middle of August, and the fishing continues with occasional intermissions until the end of January. On

this coast, they are chiefly disposed of to vessels from the Clyde, which come in numbers for the purpose. Upon the east coast, this fishing was less attended to, until the establishment made at Pulteney town, near Wick, in Caithness, by the society for the encouragement of British fisheries, about twelve years ago.

Since that period, the progress made in that fishing all along this coast, has been rapid, beyond example. In the year 1814 two enterprising individuals Messrs. A. and D. Simpson from Morayshire, proposed attempting it upon the coast of SUTHERLAND, and as this came directly within the immediate scope of the plans laid down for the improvement of the estate of SUTHERLAND, and for the employment of the people who were moved from the hills, it was agreed to afford them every encouragement, and the most liberal assistance. The situation fixed upon, was at the north-east side of the river Helmsdale, one of the most considerable rivers in the county. Previous to the above date, *there was not a boat belonging to the place*, except those employed in the salmon fish-

to face page 127.



Wm. Forbes, Brown del.
Pub. by Longman & Co. July, 1820.
Jas. Bell, ex Drug Sir Bloomsbury

ery. It was agreed to build for them a complete curing yard, with sheds, which has cost about TWELVE HUNDRED POUNDS, for which they pay SIX and a HALF per cent. Owing to particular circumstances, a similar arrangement was entered into with Messrs. LANDLES and CALDER, of Berwick. This yard is rather upon a more extended plan, to which a red-herring house has been added. It cost in all about TWO THOUSAND ONE HUNDRED POUNDS. Since that period, extensive curing yards upon similar plans have been built, by Messrs. BELL of Leven, REDPATH of Berwick, MILLER, ROBERTSON, and NELSON of Leith, and Ross of Golspie. Besides which, a large lot has been taken by D. HORNE, Esq. for the purpose of erecting warehouses, for the convenience of storing and exporting his wool. Another extensive curing yard, with a red-herring house, and which they call the Strathnaver yard, has been built by Messrs. SIMPSONS, who have also built a house for their own residence. A good inn has been erected by Mr. GEORGE ALEXANDER of Golspie, to whose exertions both here and at every other place, where buildings have been erected on the estate,

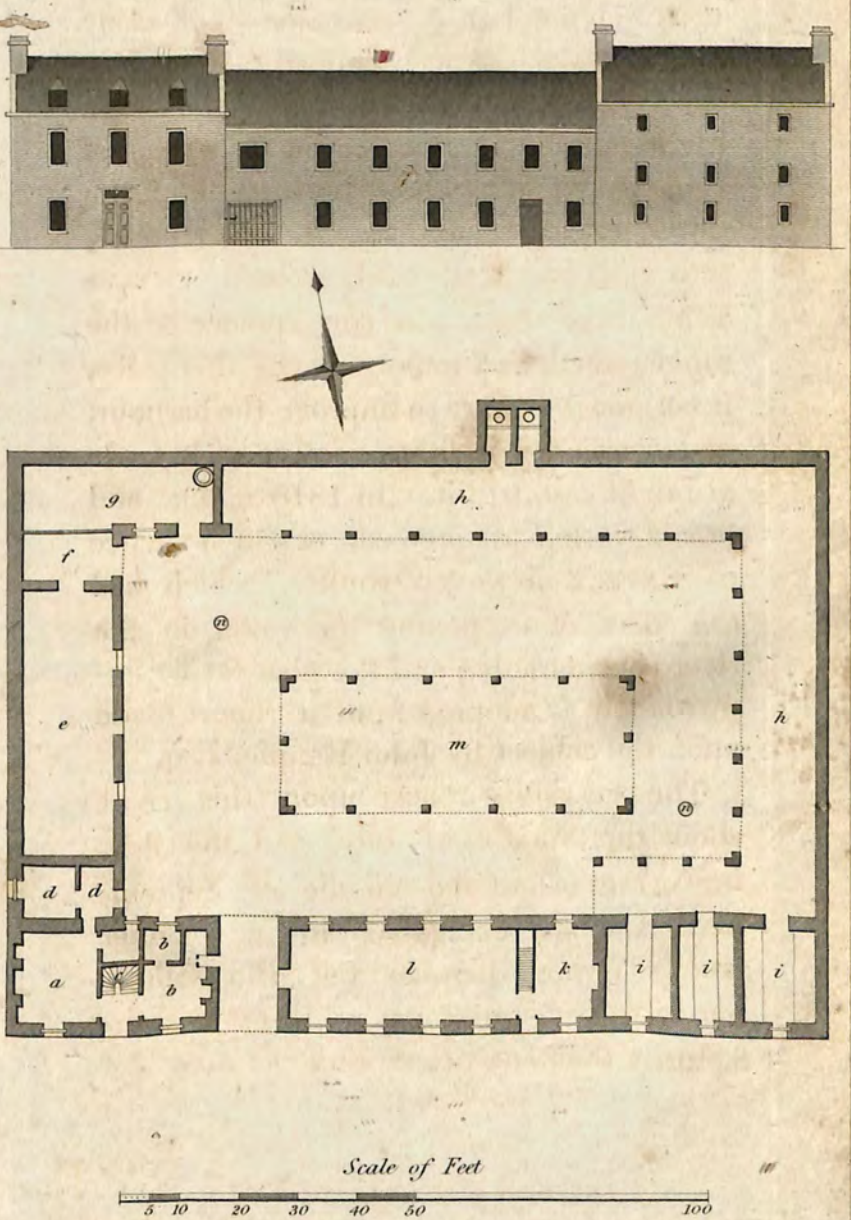
much credit is due. All the works he has executed are of the most substantial sort. NINE houses constructed of stone and lime, have been already erected in the village, and it is expected that TWELVE more will be undertaken, in the course of the ensuing summer. The amount of the outlay on these buildings, including SIMPSON and LANDLES' yard, exceed TWELVE THOUSAND POUNDS. In consequence of the rapid growth and importance of this place, it became necessary to improve the harbour, and to render it fit to receive such trade as might resort to it. In 1818 a pier and breast-work was erected, at an expence of SIXTEEN HUNDRED POUNDS, which had the effect of deepening the water in the river considerably; and the plan for its improvement is adopted from a report made upon the subject by John Rennie, Esq.

The herrings appear upon this coast about the middle of July, and the fishing ceases about the middle of September. It has encreased in a manner wholly unprecedented; but the following table will point out this more satisfactorily than any description can do.

PLAN AND ELEVATION OF A

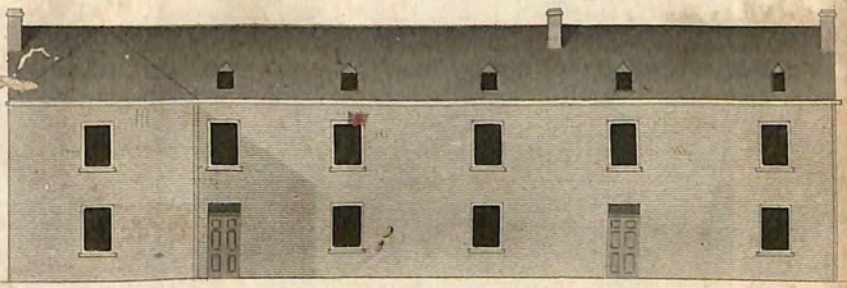
CURING YARD AND RED HERRING HOUSE

AT HELMSDALE ERECTED 1817.

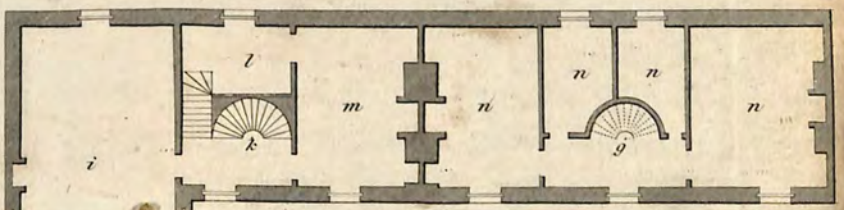


Geo. Alexander, Golspie, del. Pub. by Longman & Co. July, 1820. Sidy Hall, sculp.

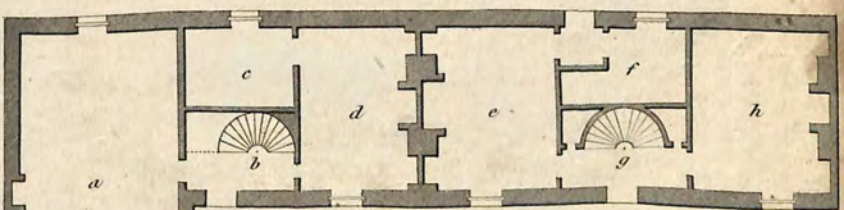
PLAN AND ELEVATION OF THE SURREY AND BELGRAVE ARMS INN AT HELMSDALE ERECTED 1819.



By Mr. George Alexander, Golspie.



First Floor.



Ground Floor.

Scale of Feet.

5 10 20 30 40 50

Geo. Alexander, Golspie, del. Pub. by Longman & Co. July, 1820. Scott Hall, sculp.

Years.	Coopers.	Women.	Men.	Boats.	Barrels.
1814	8	60	80	20	2,400
1815	17	130	200	50	4,000
1816	32	240	400	80	7,300
1817	44	330	550	110	9,350
1818	70	520	700	140	14,390*
1819	70	645	1020	204	20,000

The value of such a trade in such a country, cannot be too highly estimated under any circumstances; but when considered as the part of a plan for the general improvement and melioration of the estate, more particularly in as far as the employment of the removed tenantry was an object, it is a matter of the highest importance. To have been able to communicate in so short a time so much industry and steady exertion, to a population so recently abandoned to the most irregular and inactive habits, is a matter of no light moment. Already a large proportion of the coopers are *natives of the country.* Boat-building also has become a trade, which is followed with much success, and many of them are built by SUTHERLAND men among the

* Besides 5000 repacked and exported from this port, which were caught by Messrs. Simpson's boats off Tarbetness.

neighbouring scttlements, and launched from the side of the mountain into the sea by the united exertion of the people.

The trade of this port, and the industry occasioned by it, has for the last two years circulated near THIRTY THOUSAND POUNDS a year in this neighbourhood; about *one half of which sum* went to the men engaged, and out of which they had only to pay for their boats and nets, arising from an article which heretofore was entirely lost. In what other way could these men have made any sum of money equal to this, and how long would they have been, under the old system, in realising as much profit to the country at large?

It has already been mentioned, that *previous to the year* 1814, *there was not a boat belonging to this creek*; in 1818 there were cleared out TWO THOUSAND NINE HUNDRED AND SEVENTY-THREE REGISTERED TONS OF SHIPPING; and in 1819, there entered FIVE THOUSAND TWO HUNDRED AND FORTY SIX TONS OF REGISTERED SHIPPING. In the Appendix is an account of the trade of this port for the year 1819.

The intercourse with Leith has become

an object of such importance, that a regular trader between the two ports is about to be established. This undertaking has been promoted by those persons connected with the port, and some of the neighbouring gentlemen; including James Horne, Esq., of Langwell, in the county of Caithness. The adventure is divided into shares of 20*l.* each; Lord Stafford has taken two shares.

The herring fishing was tried for the first time at Brora, a harbour farther up the coast, in 1819, which gave employment to THREE coopers, THIRTY women, and SIXTY-FIVE men, who caught a THOUSAND AND FIFTY-TWO barrels of herrings; a fair beginning for so small a place. In the Appendix is contained an account of the shipping and trade of this port, also a recent creation.

The herrings appear upon the Strathnaver coast about the beginning of July, but hitherto the boatmen of that district have found it more advantageous to hire themselves to the curers at Helmsdale, than to attempt the fishery at home, — though an attempt was made last year to catch them from Port Skerra, the port in that quarter,

best suited for the attempt. It was attended with fair success.

Helmsdale, however, is peculiarly well suited for a herring fishing station, it never has the extraordinary success which occasionally attends other parts of the Moray frith; but there is a constant and regular take, by which means the curers are never overloaded, enabling them to do up the fish in the best style. This has secured them a good character in the market.

The herring fishing being carried on near the shore, in fine weather most of the young men from the hills came down to one or other of the neighbouring ports, from whence it was carried on, to participate in its profits. This circumstance has been of great use, as there are none of those who have been latterly moved to the coast, but such as had been in some degree accustomed to this mode of life, and many of them even had shares in boats. The money accumulated from the three last years' fishings, has in part been most judiciously expended, in the purchase of larger boats, approaching in several instances to the size of those navigated by the South-

frith men. In a few years, the character of the whole of this population will be completely changed, as has happened in the instances of Amadale and Port Skerra, who are now the most enterprising boatmen possible. The children of those who are removed from the hills will lose all recollection of the habits and customs of their fathers, and it is to be hoped that they will never experience that want, to which their parents have been so frequently, and so severely exposed.

Notwithstanding this great success, much anxiety was felt, that the people should not depend on the herring fishing alone, as the only source of their livelihood. It was objectionable, on the score of its lasting only for a very short period of the year, and because the migratory habits, and hitherto uncertain course held by those immense shoals of herrings, which annually visit our coasts, rendered it doubtful how long it might continue in its present flourishing state. It became most desirable on this account, that, as fishermen, they should possess some more constant and certain employment. It has been already remarked,

that it was always known that the seas of Sutherland abounded in white fish, and the Moray fishermen have been in the habit, for ages, of stretching across from their own shores, close under the coast of Sutherland, deriving an excellent livelihood from their exertions; while the people of the latter county never thought of putting out a boat, to avail themselves of the gifts which nature had so bountifully placed immediately within their reach. To encourage the cod and ling fishery, there was built, in 1811, an excellent range of houses at Brora, at an expence of FIVE HUNDRED AND SIXTY POUNDS, and a still more extensive set of premises at Portgower, at an expence of about ELEVEN HUNDRED POUNDS. The former are now inhabited by a set of natives, as enterprising and successful fishermen as any in the Frith. The latter are inhabited by fishermen, from the Aberdeenshire, Kincardineshire, and Fifeshire coasts, who have been induced to settle at this place. Among them, there is also a Dutchman, who, having been taken prisoner during the late war, was sent to Caithness, for the purpose of teaching the people to cure herrings after the Dutch

fashion. Having married a native of the country, he preferred settling at Portgower, in place of returning to his native country, advantageous offers having been made to him for that purpose. He is a native of Friesland, and being a very daring boatman, he has been of infinite use in teaching the people to go to sea in all weathers.

The best boat station upon the coast for a fishing village, is in the bay of Naviedale, beyond Helmsdale. It is better protected, and has deeper water than any other creek on the same side of the Frith, besides, as it is a rocky coast, it is well suited for the curing of hard fish. In consequence, however, of its being tied up by a long lease, it was not possible to take advantage of this place until the year 1819, when an arrangement was made with the subtenant, by which possession was obtained of the shore, and a cottage has been built, with sufficient accommodation for a boat's crew. At this place Mr. Suther has been enabled to establish James Ritchie, and a crew of Frazerburgh fishermen, a matter of great importance to the future success of these establishments, as he is admitted to be the most

skilful fisherman in the north of Scotland; it being through his exertions, and by following his example, that the men of Assynt became so bold and intrepid seamen. It is hoped that a similar benefit will be derived to the people on the Moray Frith coast, from having so excellent an example before their eyes.

The district of Assynt is possessed of the finest harbours on the estate, while the coast of Strathnaver possesses only a few wretched creeks, into which the boats can be drawn. The Assynt people have for some time been both skilful and daring boatmen, yet they are now equalled in both these requisites by the coast-side men of Strathnaver, who have, with a rapidity beyond belief, become the most intrepid and dauntless seamen. The alacrity with which the young men from the hills have taken to this mode of life is such, as no person could have anticipated.

The number of boats belonging to Assynt, engaged in the cod fishing, amount to SEVENTY-EIGHT, manned with six men each; the number belonging to the Strathnaver coast amounts to TWENTY-TWO, each manned

with SEVEN men, every one of whom took to cod and ling fishing, for the first time in 1818, and in that year FIFTEEN boats killed TWENTY-ONE THOUSAND AND ELEVEN cod and ling. On the Moray Frith coast, the number of boats yet employed in this fishery, is very trifling.

The cod and ling fishery commences in Assynt in the month of March, and finishes in July. During the winter months, they fish from THREE to FOUR MILES off the coast, in about THIRTY FATHOMS water. In summer they stand out about FIFTEEN MILES, to the edge of the *well-known* great bank, which stretches from Hoyhead, in Orkney, to the Isle of Skye. They sell them to the curers for about two-pence a fish.

In the Strathnaver district, the fishing commences about the beginning of October, and ends in July, in time to permit the boats getting to the herring fishing. In winter they fish off the heads, in from THIRTY to THIRTY-FIVE FATHOMS water, but in summer they stand out from FOUR to FIVE MILES off the coast, where the fish are caught, in from about FORTY to FORTY-FIVE FATHOMS. They get from about two-pence to two-pence halfpenny a fish.

The cod fishing in the Moray Frith, commences soon after the termination of the herring season, and lasts till it comes round again. The best fishing ground, is on a bank, which has been ascertained to stretch from Tarbetness in Ross-shire, to Clytheness, in the county of Caithness. In winter the fish lie generally on the north side of this bank, about TWO MILES off Helmsdale. In summer they shift their ground about SIX MILES more to sea. In both cases, they are taken in about FIFTEEN FATHOMS water. The prices on this coast are somewhat lower, in consequence of there being no ling caught in the Moray Frith.

In order to do every thing possible for the encouragement of this branch of fishery, and to induce the natives to go to sea, there have been distributed many thousand hooks and lines, and for the last two years premiums have been bestowed to a very considerable amount, for each of the three districts of Strathnaver, Assynt, and the Moray Frith. Lord STAFFORD has given three prizes of TWENTY POUNDS, TEN POUNDS, and FIVE POUNDS, respectively, to the three most successful boats in each of these three districts; he has also bestowed a premium of TWENTY

POUNDS upon each of these three districts, to be awarded to the person who shall have, during the preceding twelve months, furnished a boat at his own expence, and manned her entirely with a crew of natives of the district, who had never been before at sea. A farther premium of FIVE POUNDS, which is common to all the districts, is bestowed, for any act of particular perseverance, or praiseworthy intrepidity. The distribution of these prizes, in stimulating the exertions of the fishermen, has been very great. They are awarded at Helmsdale, during the herring season, where the principal boatmen of the three districts are generally assembled, which has produced much emulation among them. In the year 1818, the number of measurable fish caught, amounted to NINETY-THREE THOUSAND, ONE HUNDRED AND SIXTEEN. In 1819, they amounted to ONE HUNDRED AND TWENTY-THREE THOUSAND, EIGHT HUNDRED AND THIRTY; but the total number of fish caught that year and delivered for curing, consumed by the fishermen, or sold to the country, amounted to ONE HUNDRED AND FORTY-FIVE THOUSAND EIGHT HUNDRED AND SIXTY.

Such being the facts in regard to this part of the arrangements adopted in Sutherland, for the improvement and melioration of the people, they may be confidently stated, as having completely succeeded, and as being in every way established. Their future success and increase must now depend upon the steady and patient industry of the people themselves. Every thing that it was in the landlord's power to do, has been completely performed. Houses, roads, * harbours, curing-houses, and the settlement of fish-curers, through whom, the home and foreign markets have been opened to the industry of the people, have all been accomplished at the expence, or through the exertions of the landlords. As yet these exertions have been rewarded by the industry of the people, and there seems to be no reason to doubt, but that they will

* To promote the general prosperity of the district, and to render the navigation of the Moray Frith as safe as possible, Lord Stafford subscribed THREE HUNDRED POUNDS, towards the construction of a harbour at Portmahoamac, to the eastward of Tain, in the county of Ross, one moiety of the expence of constructing the works at this place being defrayed by the Parliamentary Commissioners.

continue in the course they have begun, and will soon give to this distant and hitherto unimportant district of the island, a consequence, and an importance which few could conceive it ever capable of attaining.*

* It has been frequently urged, and confidently stated, that the highlands of Scotland, being one of the great nurseries for the supply of the army, every measure should have been avoided that might, in its consequences interfere with this most important object, and that no step should have been taken, which might deprive the country in future wars, of those men whose services were so essential for its defence. These assertions have been made with so much appearance of authority, as to produce a feeling in many excellent persons, that under no circumstances, should any change have been introduced into SUTHERLAND. But allowing that, in the case now under consideration, a different rule should have been adopted from that which had been followed in every other instance, and admitting that, in this respect, the controul of proprietors over their own property should have been given up and abandoned on publick grounds, and for publick objects, it may be asked, for what end would this have been done, or what real assistance would such a line of conduct have contributed to the service of the state? Upon no subject, has there been more unauthorised statements hazarded, or in respect to which greater misconceptions prevail, as a simple statement of facts, and a reference to figures will at once demonstrate.

The general dislike entertained by all highlanders to enlist by the ordinary means of recruiting, and in the first instance for general service, has been already

It now remains to be considered, how far the other part of the plan laid down for the

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noticed. The history of every highland regiment, raised during the two last reigns, is an illustration of this fact. This feeling they possess in common with every other agricultural and pastoral people; but with them it is much heightened, from their unwillingness to enlist, unless they are tempted to do so with the offer of a "tack" of some farm, and unless they have, in some degree, the selection of their own officers. It is further to be observed, that a considerable proportion of some of the highland regiments were, of late years, composed of Englishmen and Irishmen, especially the latter; a change in their composition, which took place without these gallant corps losing any of their original reputation, or high character. The necessity for this, arose from the circumstance of the Highlands (with the exception of the estate of Sutherland) having for some time been occupied by stock farmers. Nor should this be a matter of regret, as the natural nurseries for the army must be at all times, but especially at the commencement of hostilities, the great manufacturing districts of the country, where every new war necessarily throws out of employment a large body of men, who, having lost their ordinary means of support, willingly enlist, that they may obtain a new source of livelihood. An agricultural and pastoral population are but rarely, and slowly affected by such vicissitudes. It is therefore quite clear, that it is not from the latter class of society, that men can be procured for the publick service, either in the readiest way, or at the cheapest rate. A man who is out of work can of course be induced to enter the army, on far better terms for the country, than he who

improvement of this estate, has answered; namely, the conversion of the mountainous

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is to be bought from his usual occupation. It may almost be said, that for the latter to be brought into competition with the former, is an improper and unwise interference with that natural order, which so admirably disposes every arrangement when not interrupted by the vexatious intermeddling of man. It is, besides, depriving the necessitous of their bread, to bestow it upon those who do not need it, and will not accept of it, unless they are bribed to take it. This is so much the case, that the soldiers of a purely agricultural nation, must either be purchased at an extravagant rate, or must be obtained by a conscription; unless, indeed, the people can be induced to destroy their domestick habits, in the first instance, by engaging for a more limited service, such as in a fencible corps or a militia regiment. This took place with almost every Highland regiment raised during the late war, including the "Sutherland Fencibles," now the 93d regiment of the line.

The population of that district of Scotlan dproperly called the Highlands, is, according to the returns of 1811, fully stated at 340,000 souls, or about the FIFTIETH part of the population of the United Kingdom. Taking off one half of this number for females, making the ordinary allowance for children, the aged and infirm, setting aside the necessary proportion of adults who must remain at home; to how small an amount is the annual quota, from the Highlands of Scotland, to the public service reduced; and even out of this reduced number a portion must have entered the naval service of the country. In the latter years of the

districts into sheep-walks; and to examine whether the increased productiveness of the country, and of this mode of management, has equally justified the expectations formed in regard to it. The first

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late war, the army, exclusive of foreign regiments, exceeded 220,000 men, (Ed. En. vol. ix. p. 22.) and there were in the pay of England, at the same time, about 140,000 seamen and marines. Exceeding together in amount, the whole of the population of the Highlands of Scotland. The practical use of these observations is, to demonstrate how mistaken those averments are, which are meant to lead to the conclusion that the Highlands were one of the principal sources from which the army of England was recruited. But how much more striking do these observations become when applied to the population of the county, and still more so, when applied to the population of the estate of Sutherland: the numbers in the one case being about 23,000, in the other under 15,000 souls. But after all, the short and simple answer to the assertions which the foregoing considerations were intended to obviate is, that under the new arrangement there will be maintained at least as numerous a population, and one much more ready to furnish its proper quota to the service of the state, and that upon much easier and better terms to the country, than that which preceded it; besides securing to the nation, at the same time, all those advantages, and to the people themselves all those comforts which have been so fully and minutely described.

change which occurs in these lands, after being converted into sheep-walks, is, that all the haughs and holmes on the sides of the burns and rivers which were formerly under cultivation, are covered with a sweet and luxuriant herbage. These districts are generally preserved, in order to form the wintering to the hilly range lying most contiguous to them. The growth of this herbage preserves these haughs from the injurious effects of floods in the rivers, so apt, when they are in tillage, to be carried away; in consequence of which much valuable land is destroyed.

The next alteration which occurs, arises from the judicious draining of such swamps as will, when freed from water, become valuable; and from the construction of surface-drains, conducted along the sides of the mountains, for the purpose of catching and conveying off the water into the different natural streams, without permitting it to lodge or do any other mischief.

It should be explained, that the complete drainage of these swamps is not thought of. All that is attempted is, to relieve the surface of the bog of water to such a degree

as to permit the natural herbage to grow up, and to support a sheep. It still remains impracticable to a heavier or less active animal. It is thus evident, that a large portion of these mountainous tracts are rendered productive, when applied to the purposes of stock-farming, which, under any other system of management, must lie waste and unemployed.

These sheep-drains, as they are technically called, have been executed to the extent of many miles on every stock-farm upon the estate. The effect of these drains, in conjunction with the burning of the heath, and the grazing of the sheep, is to encourage the growth of the natural grasses which in time cover the mountains in place of heath, where the hill is at all of a kindly nature. This change has been produced in Sutherland to a great extent, and many thousand acres of the finest pasture now exist, where nothing but heath formerly grew. It is estimated by one of the most intelligent and extensive stock-farmers in the county, that these operations alone encrease the productive powers of the land by nearly one-third.

It is not easy to state the actual amount

of sheep in Sutherland, or the value of the exports annually made of wool and stock to the southern markets. By as accurate an estimate as can be made, however, it is conceived that the number of sheep in that country amounts to about ONE HUNDRED AND EIGHTEEN THOUSAND Cheviot, and THIRTEEN THOUSAND black-faced sheep. The greater portion of the latter, however, are about to be disposed of, and replaced by Cheviots. But as many of the most extensive grazings have been only lately applied to this mode of occupation, they cannot as yet be completely stocked, and the annual addition to the productive powers of these pastures, must likewise require an annual addition to the flocks. The annual exportation of wool exceeds 415,000lbs. which is sold at the annual Inverness market held in June. At this market, the Yorkshire manufacturers attend, as the most central point, to meet all the Highland stock-farmers. The establishment of three stage-coaches to this place, besides the mail, renders the communication between Inverness and Edinburgh a matter of as much certainty and ease, as with any other part of the island. Many flocks of

300 to 500 sheep each, are also driven south every year, to be sold at the border and Yorkshire markets, or fed upon the farms occupied in Northumberland by the stock-farmers of the north, amounting in all to about 30,000 sheep.

The practice of the border-farmers is, to divide the farm into ewe-lands, hog-fence, gimmer-hirsel, and wether-hirsels. The ewe drops her lambs about the first of May, just when the deer-hair comes into season. It follows the dam until the deer-hair fades in August, when it is weaned, and put under the hog-herd. He keeps his flock on high ground for a few weeks; but shortly drives it along with any weak sheep of the farm into the hog-fence, consisting of lower ground, and where turnips are, if possible, grown. Here he tends them until the mountain-snow begins to melt in Spring. As soon as the mossing-grass has sprung in February or March, and the weather is apparently somewhat settled, he delivers over his charge, — the ewe-hogs to the gimmer-herd, and the wether-hogs to the wether-herd. He then assists the ewe-herds in lambing their hirsels, and wherever else extra help may be required, until August,

when he receives the next set of lambs, as in the preceding season. Meantime the young sheep delivered off his charge in March, follow two several courses: the ewe-hog, or gimmer, after being kept eighteen months, is delivered at two years and a half old to the ewe-herd, where she continues until she drop three or four lambs, and is then sent south to the English feeder. The wether-hog continues in the wether-hirsel two years and a-half, and at the age of three years and a half he passes south in like manner.

The introduction of the pure Merino has also been tried by Mr. Sellar. The experiment has been made for several years, and at first with considerable success. The winter does not appear to affect them, indeed it would appear that the quantity of the wool is great in proportion to the severity of the weather. They are, however, not calculated for the wetter parts of these hill pastures, and their habits being unfit, in some instances, for their beneficial occupation, Mr. Sellar means to get rid of them.

From these details it will be seen, that, in consequence of the mountains being

converted into sheep-walks, those districts which were heretofore perfectly unproductive in a national point of view, have begun to contribute very materially to the support of the woollen manufactures of England, and to produce the means of support to the artizans of Yorkshire, who are employed in working up the raw material. This also, at the same moment that the original inhabitants of the hills are employed on the coast, in increasing their own comforts, and adding to the surplus supply of food for some of the greater towns in the south, for the support of the population of our West-Indian colonies, or for exportation. Thus then the second branch of this great and interesting arrangement is shewn to be as successful in its result as the first has proved itself to be.

The only point which now remains to be considered, is the state of the cultivation on the coast side of Sutherland, with the improvements which have been effected in that branch of the husbandry of the county.

It may well be conceived, from what has been already said, that there had been as little improvement in this as in those other branches of rural management already dis-

cussed. Previous to the year 1812, the cultivation of Sutherland was so defective, that it did not supply itself with hay; and when the seasons were bad, it was not an uncommon circumstance to import it from the adjoining county of Ross, and even from the opposite side of the Moray Frith. Since that period, every exertion has been used to introduce a better and more enlightened system of husbandry. Every encouragement has been held out, to induce farmers from the more improved districts of Scotland, to occupy some of the coast-side farms. Every incitement was held forth to the native tenant to follow the system which he saw adopted upon the farms so occupied. The advantages to be derived from the new course being carefully explained to them, and the beneficial results of pursuing it, being distinctly pointed out in the first instance, soon produced more convincing arguments, and intelligible reasons for adopting them. Artizans and ploughmen were brought and settled in the country. The most improved implements were procured, seeds of the best description were imported. Besides, every en-

couragement was given, by granting leases on moderate terms, and for a sufficient endurance to induce the tenants to exert themselves in the better cultivation of the coast-side lands.

The consequence has been, that extensive fields of wheat, (some of them drilled according to the most improved system of Norfolk husbandry,) several hundred acres of turnips sown upon the ridge, and well horse-hoed, with excellent crops of barley, (the seed of which was imported from Norfolk,) and clover, are now seen, where, a very few years back, there was nothing to be found but some patches of the most miserable oats and bear, with which the land was alternately cropped, until it was brought into such a state of exhaustion, that it would not even produce the seed that was bestowed upon it. It was then left in a state of nature, to recruit its strength under the cover of every sort of weed until it became necessary again to have recourse to the same miserable routine of barbarous husbandry. Even the advantages presented to them by nature were neglected, and it was not until of late years that that valuable manure, sea-ware, which

is at times thrown up in great abundance upon the coast, was used by the farmers in the cultivation of the land. It is now sought after with great eagerness, and has been used with equal advantage as a manure for the arable land, and as a top dressing to the fields laid down to perpetual pasture. These improvements, commenced about the year 1809, since which period no less than TWENTY-SEVEN sets of farm offices have been constructed; about one-half of these have been erected, either wholly or in part, at the expence of the proprietor; the remainder were erected by the tenant, and are to be paid for by the landlord at the end of the lease: — A fact which speaks every thing as to the former condition of the estate, and the rapidity of its amelioration.

These exertions have not been confined to the estate of Sutherland. Lord Ashburton has planted, enclosed, and constructed roads to a considerable extent. New farm-houses have been built in the most inaccessible parts of the Reay country. Upon the properties of Creech, Ospisdale, and Skibo, enclosures have been made; and plantations and cultivation have been ex-

tended over the most unpromising and barren spots. The improvements upon these latter estates, within the last four years, have completely changed the appearance of the country. The new inclosures at Creech are on an enlarged scale; and the general improvement of the estate is an object well worthy the attention of every practical agriculturist. At Ospisdale, the conversion of land covered with heath into fields bearing wheat, is not less worthy of remark. The land so converted is as bare and as hard as any part of the same district, which, extending into the estate of Sutherland, forms that portion of it called the Dornoch Muirs. Affording an unequivocal proof of the fitness of this district of the estate of Sutherland for the settlement of cotters, supposing the industry and success of the original settlers on it had not afforded a still stronger case of its capability in this respect. In order to bring these muirs more speedily into cultivation the Dunrobin ploughs were employed, during 1819, to turn them over. They ploughed more than ONE HUNDRED acres of excellent turnip and barley soil, heretofore consisting of nothing but brown heath. This has been attached as a farm to the inn

at Clashmore. This season FORTY-FIVE acres have been ploughed, and they are to be cropped under the direction of the bailiff at the mains, in order to show the country how well suited these muirs are for cultivation. In point of labour the cultivation of this district is nothing as compared to what has been done at Skelbo, Culmailly, Rhives, &c. as will be hereafter more particularly described. In these latter cases, it was necessary to double dig, or trench, as it is called in Scotland, the whole with the pickaxe, which is far from being the case with the Dornoch muirs.

There is added in the Appendix, a particular description and statement of the arrangement and improvements of the estate of Sutherland, with the alteration which has taken place in the habits and manners of the people, in consequence of them.

To these various subjects of improvement and expenditure, are to be added the repairs of the kirks, ministers' manses, and the school-houses of the nine parishes in which the estate of Sutherland is situated. In those where Lord and Lady Stafford are the sole heritors, the entire expence of course has fallen upon them, which has been very great.

In the parish of Farr, a completely new manse and offices have been constructed; and in the parish of Loth, it is necessary to erect a new church, adequate to the accommodation of the increased population of the parish. From the shortness of the summer, and the moistness of the climate, the walls of all buildings suffer severely. This is particularly evinced, from the rapidity with which the lime is thrown out of the joints of the mason-work. Directions have been lately given to point up the joints of all the new buildings with Parker's cement. It is expected that, although this will add somewhat to the original cost, that it will add materially to the permanent durability of the buildings, and will obviate the necessity of frequent repairs; besides rendering unnecessary, rough-casting the buildings in the manner now practised.

It may be remarked, as has been already done, in discussing the difficulties which occurred in the construction of the new roads, that the magnitude of such undertakings is not to be calculated by their number, nor by the extent of each; though, even judging by this criterion, no mean idea may be formed of the exertions which were necessary to complete them.

Before they can be fully estimated, it must be recollected, that it was necessary, in the first instance, to collect carpenters, masons, smiths, and all other tradesmen and mechanics, from the counties lying on the opposite coast — that the lime, whether used in building or in agriculture, was to be imported from Sunderland — that Newcastle supplied coals — the interior of Aberdeenshire and the west coast of Scotland, slates — Speyside, timber — Peterhead, bricks and tiles. With the single exception of stones, none of the materials were found in the country. Even these were, with the exception of two quarries, almost unfit for building. Such as they were, they had to be sought for within high-water mark, or on the tops of the mountains, so that the labour of procuring them, and the expence of forming them into shape, opposed obstacles to which few districts of the country are subject.

It was an object of great moment, therefore, both for present saving, and for the future prosperity of the country, to discover if any of these first necessaries in the advancement towards a higher stage of civilised life existed, or could be manufactured,

in the country. This was important, also, as either the discovery of the one, or the establishment of the other, would open a new source of employment to the inhabitants.

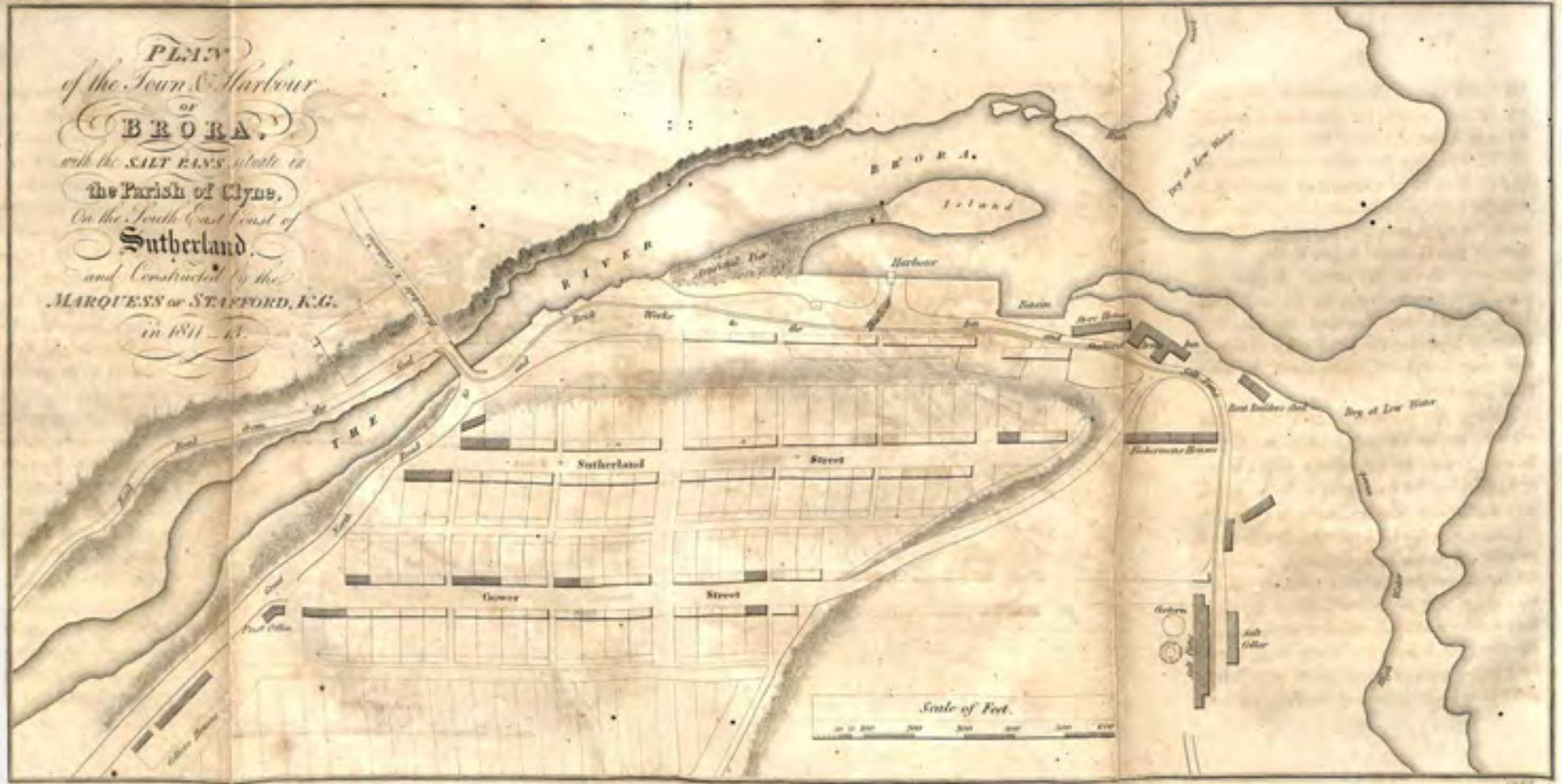
Of these articles, lime, upon the whole, was the most essential. The substantial tenant could, either by himself, or in conjunction with others, purchase a cargo of lime from Sunderland; and mutual necessity made the landing and securing it the business of the adjoining farmers. Such an exertion, however, was far above the means of those settlers, either individually or collectively, who had been removed from the mountains, and who were straining every nerve in the cultivation of their lots, or in converting their mud-huts into cottages built of stone and lime. Unless this article, therefore, could be procured by them, as the occasion suited (whether for the one purpose or the other), in quantities sufficiently small, and at such periods, as they could obtain the hire of a horse and cart, it is evident, that their exertions must have been checked in the out-set, and all chance of their improvement must have been at once cut off.

A diligent search was accordingly made, and limestone was discovered; and a kiln was erected near the village of Golspie, upon the sea-shore. The quantity, however, was not great, and, unfortunately, it was wrought out in the course of 1818. A further search was, therefore, necessary; and it was discovered that a great proportion of the rocks along the coast, from Midgarty to Naviedale, consisted of this valuable material, and its sufficiency for all purposes has been decisively ascertained by Mr. George Alexander, who has constructed all the buildings at Helmsdale with it.

Fuel to burn it was not absolutely wanting, so long as peat or turf could be obtained. Still, however, the labour and cost of getting this, made it a tedious process, and an expensive article. Coal had formerly been worked on this coast, near the mouth of the Brora. It was determined to make another trial, considerably farther up the river; and his Lordship succeeded in finding a coal from three feet two inches to three feet eight inches thick, at the depth of two hundred and fifty feet from the surface. Its extent has been lately ascer-

tained, by driving levels, to be very considerable; and it is not subject to several faults which it was feared would disturb or cut it off. It has been skilfully contrived to fix the situation of the first shaft and the engine-pit in such a manner that the raising of the coal, and the pumping of the water, is performed by a very powerful water-wheel, capable of a double motion. A railway, extending about eight hundred yards, has been laid from these pits to the harbour at the mouth of the Brora. A new shaft is now sinking to the westward of the river, to which the railway must be extended by means of a temporary bridge. The expence in fitting out these works, and in constructing the buildings connected with them, amounted to the sum of SIXTEEN THOUSAND POUNDS. In order further to make use of the small-coal which the demands of the country would not carry off, four large salt-pans have been erected in the vicinity of the sea, with a proper reservoir for the salt-water which is filled by means of iron pipes, carried to below low-watermark. The salt-pans are connected with the pits and the harbour by means of an extension of the railway. They, toge-

PLAN of the Town & Harbour of BRORA, with the SALT PANS situate in the Parish of Clyne, On the South East Coast of Sutherland, and Constructed by the MARQUESS of STAFFORD, K.G. in 1811–13.



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ther with the works connected with them, cost THREE THOUSAND THREE HUNDRED AND TWENTY-SEVEN POUNDS. The manufacture of salt is carried on to a considerable extent. It is of a nature and quality very superior, owing to the saltness of the salt-water; the freshness of the more southern parts of the German ocean having no influence so far to the north. It now supplies, almost exclusively, the demand of the Moray Frith, and has had the excellent effect of lowering the retail price of salt to the poor people of Sutherland, by more than one-third.

Among the buildings which have been erected, are an extensive range of colliers' houses, houses for the salters, with a house and office for the manager; with the necessary workshops, stables, and granaries.

These circumstances, combined with others, pointed out Brora as a place well calculated for the establishment of a village. Every encouragement was accordingly held out to shop-keepers and others, and several building lots, on leases for ninety-nine years, have been granted; and there are already erected several excellent houses, of two

stories, occupied by small merchants, tradesmen, and artificers. A post-office has also been built, to which the principal persons in the neighbourhood contributed. The manager's and the colliers' houses cost about THIRTEEN HUNDRED POUNDS. In consequence of the great demand for boats at this place, there have been erected, at an expence of about ONE HUNDRED POUNDS, sheds every way convenient for this branch of trade; and a boat-builder has been accordingly settled at this port, and who has as much employment as he can overtake. In the year 1818 he built twenty boats for the use of the coast-side settlers. For the convenience of the village, an inn, called the Stafford Arms, at an expence of THREE HUNDRED AND EIGHTY POUNDS, was fitted up; and, in order to encourage the use of malt liquor, in the hope that in time it would supersede the use of whiskey, Lady Stafford advanced TWO HUNDRED POUNDS for the construction of a small brewery. The tenant, Mr. James Scott, from Elgin, brews excellent small beer; and the increased consumption of the article, shews that the taste of the people is already in some degree altered.

In executing the different buildings upon the estate, considerable difficulty, and much inconvenience was experienced, owing to the necessity of importing all the bricks and tiles which were required, from Aberdeenshire. To obviate this, a tile and brick work of considerable extent has been established, with the requisite buildings, sheds, houses for workmen, clay mills, &c. These latter are driven, by the diversion of a portion of the stream which supplies the water-wheel attached to the coal machinery. The erection of these cost about SIX HUNDRED AND FIFTY POUNDS. The coal work is under the direction of Mr. William Robertson, from near Edinburgh. The tile and brick work is conducted by Mr. William Forbes, a very ingenious young man, from Peterhead, in Aberdeenshire, who, with that industry and application characteristick of many of his countrymen, taught himself at his vacant hours the science of land-surveying and drawing. He is now employed by Mr. Suther, in all the measurements and surveys on the estate.

In the outset of these works, it was necessary to employ persons brought from the

south of Scotland, and from Staffordshire, for the purpose of instructing the people of the country. With the exception of one Staffordshire collier, who has married a Sutherland woman, the whole of the people now employed are natives of the country. It is impossible to find more steady, or more skilful workmen; and the intrepidity, and the knowledge displayed by the colliers, upon several occasions of trying difficulty, deserve the highest commendation. It is a fact of the most gratifying nature to be enabled to state, that the conduct and behaviour of these people, as well as of all the others upon the coast, have become gradually more steady and correct, in proportion as they have become more industrious. The bare mention of such facts is sufficient to show the importance of these works to the country in every point of view, and the rapid progress which the people have already made. Can there be a more convincing proof of the efficacy of that line of conduct, which has produced such an admirable effect? and it is difficult to conceive that a population, circumstanced as that of the county of Sutherland was, as it were, but the other

day, should in so short a time have been able to turn themselves to such various and to such different means of industrious occupation.

A regular weekly packet, called the Dunrobin Castle, has been established, which sails between this place and Burghhead. This considerably shortens the communication with the south, and is generally adopted during the summer season; while another vessel is employed for the purpose of carrying on such other intercourse with the coast, as the regular packet does not embrace. In order to furnish lime to the country, especially to the settlers at Brora, and Helmsdale, lime-kilns have been erected at Naviedale, and at Brora; and a large half-decked boat brings lime-stone from the former to the latter place, returning with a cargo of coal.

From the description which has been already given, of the original state of this country, it must be obvious that it was dependant for every article, not merely of comfort and convenience, but even for some of the necessaries of life, on the more southern counties. To remedy this defect,

and to obtain the supply of such articles, was one of the first objects to be accomplished. Accordingly, a baker has been established in the village of Golspie, for the supply of the castle, and of those families who had got into the habit of using bread in place of cakes. A sadler and harness maker has also been established in a house and shop built on purpose; and a shoemaker has been likewise settled in a new house fitted for his trade. The increased business which these tradesmen have obtained, point out the altered habits and the increasing comforts of the people.

At Brora, a person, who served his apprenticeship in London, has built himself a neat brick cottage, with a small garden in front, and settled as a tailor. His business is considerable. Still, however, the wants of the country are insufficient to give employment to a butcher, and those families who are in the habit of using butchers' meat, club together and kill their meat alternately. During the fishing season at Helmsdale, the consumption of butchers' meat is considerable, and a person who carries on his original trade as a

weaver at Kirriemuir in Forfarshire, comes annually north during the fishing season, to exercise the trade of butcher at Helmsdale. He kills from two to three bullocks a-week. The principal consumption is among the South Frith men; but example will, no doubt, gradually introduce a similar custom among the natives.

Before quitting this subject, it may be added, that the public jail at Dornoch being unfit for the proper confinement of prisoners, Lord Stafford repaired the ancient castle of Dornoch, formerly belonging to the bishops of Caithness, for this purpose. In this building his Lordship has also fitted up a commodious room for the use of the county, in which also the sheriff holds his court; with complete accommodation for the preservation of the publick records. To it is attached a house for the sheriff substitute, the whole having cost about TWO THOUSAND POUNDS. These buildings have been given up to public use. The county pays a small quit rent, in order to preserve entire the property of the family in the premises.

Sufficient has been now said to explain

the extent, the nature, and the propriety of the different works which have been carried on, and of the motives which have suggested them. The outlay upon these works, as may be well imagined, has been very great. The hope of immediate profit, though not neglected, has never been permitted to stand in the way of any permanent advantage, though unaccompanied with present gain; and it must be apparent, to those at all acquainted with such matters, that although, in some few instances, the returns may be immediate and direct, yet, in others, a long interval must elapse before they can be expected, while in many instances they can only be obtained indirectly through the increased industry and improved habits of the people.

It is no doubt true, moreover, that if the same plans were again to be executed, many mistakes might be avoided, and the experience which has been obtained, would lead to the saving of some expence. But this much is asserted, that, whatever mistakes may have been committed, or whatever expence has been unnecessarily incurred, there has never been at any period,

while these changes were going on, a want of consideration and attention to the interests, the feelings, and the prejudices of the people. The expenditure which has been incurred, and that which, in an economical view, might be considered as the least justifiable, was entered into for the purpose of affording employment to the inhabitants of the country, and of putting within their reach new sources of industry.

Not an individual has left the estate, who might not have remained on it if he had wished; at the same time that it is shewn that the lesser tacksmen, who have settled in Caithness, have judged more wisely in taking farms in that country, where, from the nature of the property, and the great extent of arable land, the hills may be profitably occupied as small cattle-farms. Even there, as has been already stated, these people have settled with advantages which they never could have obtained except through the bounty of Lord Stafford; and if they continue industrious and frugal, they must contribute to the general wealth of the country at large, as the breeders of cattle, which they could not have done in their original habitations.

The progress of this district is so rapid, that it is difficult to keep pace with it even in description. Since these pages were sent to the press, a subscription amounting to FOUR THOUSAND POUNDS, headed by Mr. Young, has been entered into, to purchase a steam-boat, to ply between Wick in Caithness, Helmsdale, Brora, Wickhaven, Burghhead, and Inverness, there to join another vessel of the same sort, which is to communicate through the Caledonian canal with the Hebrides, Glasgow, Liverpool, and Ireland.

With these observations, the present account of the improvements upon the estate of Sutherland is concluded, and it is conceived that there is no candid mind but will admit that the statements which have been published, in order to give a different character to these measures, are equally base and unfounded.

By some, indeed, it may be thought that too much has been done to so distant a portion of the island, by an English nobleman

and landlord, and that such exertions could not have been engaged in without neglecting other interests, and other objects, connected with the comfort of those having (to say the least) equal claims to Lord Stafford's bounty and kindness. Such, however, is not the fact; for at the same time that the improvements, which have been just described, were carrying on in Sutherland, equal and similar exertions were making on the estates of Trentham and Lilleshall, in the counties of Stafford and Salop. These exertions, especially of late, have been well seconded by the respectable and enterprising tenantry by which these properties are occupied. No where have the united exertions of landlord and farmer done more, or is there more doing at this moment, for the improvement and cultivation of the country. No where have the wants, which of late years have, occasionally, so heavily pressed upon the labouring classes, been more the subject of consideration. To secure them in work, when other means failed, employment has been afforded, to numerous classes of labourers, in the construction of new roads and other works; and every pub-

lick undertaking has been assisted in the neighbourhood which has had this object in view, either by the subscription or loan of money, or by giving up land, where it was required by the public convenience, for the construction of new, or the improvement of the existing roads. To give a complete account of these improvements would be impossible; and though, in point of profit to the landlord, and of general advantage to the nation, they are both more immediate in their effect, and more considerable in some degree, than those executed in Sutherland; yet they are less striking to the observer, as they consist more in the improved mode of doing that which has existed for ages, than in the accomplishment of works which lifts a country at once, from a state of the greatest rudeness, to a condition where every obstacle to the improvement and future wealth of the inhabitants is removed.

The most remarkable feature, in the character of Lord Stafford's English tenantry, is the eager desire and willingness they display to try, and if the experiment proves successful, to adopt every improvement suggested to them. Sufficiently alive to,

and aware of, the value of their own practice and knowledge, they are most ready to listen to, and discuss every plan that is proposed to their consideration, for the alteration of the course they have hitherto pursued. Their liberality in this respect reflects the highest credit on their judgment and understanding.

It is a circumstance not a little remarkable, that the same nobleman should have succeeded to estates in both ends of the island, on which there should have prevailed modes of occupation which had grown obsolete in every other part of the respective countries, and that these estates should have remained precisely in the same situation in which they had existed for at least two hundred years, and probably for a longer period. The cause of this singular coincidence was owing to leases for three lives, of these estates, having been granted, in the year 1755, few of which leases had expired at the time of the present Lord Stafford's succession. In this way the lands were tied up during that period, when the improvement of the country was going on with the greatest rapidity; preserving an

arrangement, which was almost as ruinous, in its effects, to those districts in which it prevailed, as the ancient condition of the estate of Sutherland was to that country.

This mode of occupation was the same as existed formerly in England and the southern districts of Scotland, and which still exists almost all over the continent of Europe; indeed, which necessarily must have taken place in a rude state of society every where; being founded on the principles of mutual defence and assistance. The preservation of the families, and the property of the occupiers of the land, would prevent this arrangement being departed from, until the protection of the laws was extended equally to every corner of the country. In a minor degree, the establishment of good roads and ready communication must have preceded the downfal of this system, and it perhaps never can be departed from entirely in those countries, where the inhabitants continue liable to the attack of the more powerful animals of prey.

Under this system, the occupiers of the land in each township resided together in

the same village. Their houses and farm-offices consisted of those strong-built, half-timbered buildings, which are still to be seen all over England, and which are more picturesque in their exterior appearance, than commodious in their internal arrangement. Behind each house was placed the garden and hemp-butt, and then a few closes of their best land. The remainder of their farm was scattered in every direction over the township. Convenience of occupation does not appear ever to have entered into their contemplation, and the same disregard to an economical distribution of their time seems formerly to have prevailed in the south, as existed in the highlands of Scotland. The closes were extremely small, and of the most irregular shape. The fences, both from their number and from their breadth, occupied a large proportion of the land. The crookedness of the ditches, by keeping the water stagnant, added to, rather than relieved the wetness of the soil; while the dispersed nature of their occupations, and their jarring and irreconcileable interests, made it impossible to adopt any general system of drainage capable of bene-

fiting the estate. This evil was the parent of another; for, in order to enable each occupier to get at the land which he held, it was necessary to retain lanes of communication, which, winding backwards and forwards from field to field, occasioned a still further loss of ground capable of cultivation.

It is not to be wondered at, therefore, that lands so occupied should have been ill cultivated; and notwithstanding the farms were held at one-third of their real value, nothing could be worse than the course of culture pursued. All that could be hoped for was, that the land should not be entirely run out by the time when the lease might expire; for as to improvement, that was not to be expected.

A considerable number of these leases are still in existence, and it is impossible, in riding over the estates, to mistake the land which is so occupied. Its worn-out condition, and the general slovenliness of its culture, points it out at once. This is the more remarkable, as, in many instances, the very same persons, immediately upon the expiration of their lease, have become, and now

are, as active improvers as any upon the estates. Engaging at once, and without hesitation, in a considerable outlay, as tenants at will, though they never could be induced to do so when they continued to hold their lands under their old leases, and which, if they had only done, must have realised to them a very considerable property: so disinclined in general are mankind to active exertion and industry, unless they are forced to it from necessity. To this there are five exceptions upon the Lilleshall, or Shropshire estate, which must not be passed over; namely, William Briscoe, Esquire, at Wapensal; Mr. Thomas Adams, at Cherrington; Mr. William Taylor, at Tibberton; Mr. William Penson, at Lilleshall; and Mr. John Lowe, at Heathhill; the extent of whose improvements, and the style of whose agriculture, will yield to none in any part of the kingdom.

It being clear that, upon the expiration of these leases, it would be necessary to adopt an entire new arrangement of the estate, the buildings had been permitted to get into such a state of decay, that there was hardly one of them fit to be occupied, even

as a cottage. The arrangement which was adopted for the improvement of this property was, laying the lands together, in farms of considerable extent, varying in size according to the nature of the soil, and other circumstances, and, in this respect, following the same course as has been adopted in arranging the coast-side farms in Sutherland, being the constant, invariable, and necessary progress of society in this respect. In effecting these necessary changes, wherever the old tenant was removed, which was done as seldom as possible, he was, unless he took a farm elsewhere, accommodated with his house and his best grass crofts for his life, at a low and inadequate rent; and in every case where it was possible to treat with the person beneficially interested in the lease, and whose continuance in the farm was incompatible with the new arrangement of the land, his interest was purchased either for an annuity, or a sum of money, *to enable him to look out for, and to stock a new farm.* Few however accepted this arrangement. The size of the farm being thus enlarged, it was necessary to enlarge the size of the inclosures, and to lay several closes into

one, and, where possible, to give them a more regular and uniform shape. This arrangement enabled the landlord to get rid of the long useless lanes, by which a considerable addition to the number of arable acres was acquired.

In order to give each tenant every advantage in draining his farm, the great lines of ditches were executed by the landlord; and wherever it was possible, these were made the boundaries of the farms. Thus the whole drains on the estate were conducted according to one uniform plan, by which the system of drainage was rendered much more complete, and the interests of the whole, and not that of any individual tenant were consulted, nor was any one allowed to interfere with the interests of his neighbour. Such a perfect system could only have been adopted under circumstances such as have been described, and it will have the effect of rendering the condition of these estates more complete in this respect than any other in England.

Attention has also been paid, in the execution of these works, to make the water

available for the construction of water-meadows, and for impelling the thrashing machines of the respective farms.

In consequence of the complete state of ruin in which the farm buildings on these estates were found, it was necessary to incur a serious expence in constructing new ones. In this way it has been necessary to erect THIRTY-SEVEN new, and to repair throughout EIGHT other extensive sets of farm offices, besides the smaller repairs which such estates necessarily require. They have been executed in the most substantial manner. They are built of the best possible brick-work, covered with tiles or slates; and their cost, including the expence of those thoroughly repaired, may, on an average, be stated at from FIFTEEN to SIXTEEN hundred pounds each.

Much attention and consideration has been given to the plans of these buildings, with the view of combining as many advantages as possible, and of arranging the different parts in such a way, as to save the time of the tenant and his people, and in order that their extent might be reduced to the

least size practicable, securing at the same time the accommodation required. The most approved plans in both ends of the island were consulted, and a gradual improvement has been made on them. The latter ones combine the advantages of the English and Scotch buildings, avoiding, it is hoped, their respective defects. To almost every one of these homesteads, is attached a thrashing machine, constructed on the best principles; wherever water could be obtained, that has been made use of as the impelling power. Of late, some of the more extensive farms have been provided with steam-engines for that purpose. In the Appendix are published plans of some of these, buildings, in which this gradual improvement is shown. It is believed that they unite as many advantages, with as few faults, as any buildings of the sort, and will supply useful hints to others.

It had been at one period the custom to permit huts, little better in their appearance, or their construction, than some of those which we have described to have existed in Sutherland, to be erected in all parts of the estate. These huts amounted in num-

ber to many hundreds; they were inhabited by the poorest, and, in many instances, by a profligate population. They were not regularly entered in the rental book, but had a nominal payment fixed upon them, which they paid annually at the court leet. These cottages were built on the sides of the roads, and upon the lord's waste, which was gradually absorbed by the encroachments which the occupiers of these huts made from time to time, by enclosing that which lay next to them. They gradually fell into the hands of a body of Middlemen, who underlet them at an extravagant rent to the actual occupiers. In this manner the poor people were oppressed, and the landlord was in danger of losing his property; affording another singular coincidence between the state of these English and Scotch properties; a resemblance which is still further preserved by the prevalence of particular classes of names among the lower people, and making the use of nicknames as necessary to distinguish individuals: these are in such general use, that, in the rental, many are better known by these designations than by

their real name. The vicinage of Wales, and the prevalence of Welsh names, may, in some degree, account for this peculiarity, though some of the prevailing names appear to be entirely English ; — Doody, Cadman, Hayward, Pritchard, Brough, Bradburne, Mansell, Corbett, Onions, Woolley, &c.

To remedy the evils arising out of this system, the cottagers were made immediate tenants to the landlord, and their rents made payable at the half-yearly audits ; an arrangement perfectly satisfactory to them, as they were no longer exposed to the vexations of an intermediate possessor, and, in many instances, their rents to the landlord were less than they had been accustomed to pay to those from which they had hitherto held their houses. Since they have been placed in this situation, greater attention has been necessarily paid to their conduct and character, as well as to their wants. As they know that their good-conduct will now be noticed by, and meet with the approbation of their landlord, a considerable improvement in their habits has taken place. There can be no doubt but that

these important and necessary arrangements were far from being agreeable to those who suffered from them. The middlemen of England were as little willing to approve of measures so detrimental to their interests as the tacksmen of Sutherland: indeed this class of men had begun to consider that they had an interest so independent of the landlord, that they occasionally mortgaged, sold, and devised their supposed interest in the premises they rented. In altering such a system, not only was the direct interest of the existing middlemen affected, but also the expectant interests and influence of many who contemplated the chance of one day benefiting from their favour. These were not few, and it did not always happen that the person who expressed his dissatisfaction loudest, was the one most likely to succeed in his wishes. If the arrangements in Sutherland were proper on general and economical principles, the changes which are just noticed, were not the less called for; as, in addition to these reasons, the further one existed, that they were absolutely necessary for the preservation of the property. And, in proportion as this

object was near its completion, was the vexation and discontent of those who were disappointed. To the larger farms some of these cottages have been added, to enable the occupier to put into them married farm servants, who have thus a great inducement to behave honestly and industriously, and to attend with good-will and zeal to the interest and the business of their master. It is by giving such inducements as this, and by making them feel an interest in acting right, that this most invaluable class of labourers can alone be maintained and supported.

What has been done by the proprietor, has been well seconded by the exertions of his tenants. A more respectable and enterprising body of men do not exist; and, while they are in a better situation of life than a great body of this class, they have not allowed themselves to forget, that it is by a constant attention to their business, by their keeping in the line of life to which they belong, and never attempting to commit the management of their affairs to bailiffs, that they have gone on, steadily improving and bettering their condition. In

the knowledge of stock, in their capacity as excellent market-men, in the management of their grass land, and in the cultivation of and in cleaning their lighter soils, they are surpassed by no farmers in the kingdom. The rotation they follow is the Norfolk husbandry; and in the cleanness of their crops, and the excellence of their drill turnips, they cannot be surpassed. The breadth of turnip annually sown is very great, and the rapidity with which they have adopted the drill system of husbandry, is as creditable to them, as it is satisfactory in the result.

Except ploughing with too many horses, and not being sufficiently active in getting in their harvest, they have fewer practices to abandon, and there are fewer things which they have to adopt from any other of the well cultivated districts of the island, than is generally the case. The lands to which these latter remarks are particularly applicable, are situated in Shropshire. Every means has been used to explain to them the advantages of ploughing with fewer horses, and following the example of Norfolk; and there is every reason to expect that their good sense will soon see the pro-

priety of these suggestions, as many of them have already adopted this system.

The fact is, that the difficulty consists in being able to persuade the ploughmen to adopt it, as the labour of holding the plough is more severe: it is impossible for one or two individuals to contend successfully against the feelings of a country; but when undertaken by so numerous and wealthy a tenantry, supported by the influence of the landlord, these feelings must speedily give way.

This mode of ploughing has made a more rapid progress at Trentham than at Lilleshall. The reason of this is, that it is more generally admitted, that this system is calculated to suit the stiff, better than the lighter soils, inasmuch, as two ploughs, drawn by two horses abreast, does much more work than a double plough, drawn by four horses, can do in such soil: the superiority of the work, also, is very conspicuous. On the other hand it is argued, and with some apparent force, that on light soils the double plough, drawn by four horses, and guided by *one* man, can do as much work as two ploughs drawn by two horses

each, and guided by *two* men. In this way the labour of one man is saved. It must be admitted that the argument would be in favour of the double plough, were it not that the work it performs is neither so neat, so perfect, nor can it plough so deep as is done by the two-horse system. It is remarkable that this mode of ploughing with two horses should be confined to the eastern parts of England, from which it was adopted, at no very distant period, into Scotland, where the ploughing with a number of horses yoked along with oxen existed to an extent never practised in any part of this country.

In order to encourage these men to make this change, an annual ploughing-match has been instituted, at which prizes are distributed to the best ploughmen. The effect this has already had is very considerable; and at the exhibition, last October, no fewer than FIFTY PLOUGHS started for the premiums. The progress of such a system must be also slow; as it cannot be expected that the tenants should at once lay aside all their old implements, and purchase new.

The difficulty of procuring good ploughs operated much against the adoption of this

mode of ploughing. In removing this inconvenience, there has been established, both in Shropshire and in Staffordshire, a manufactory for the construction of the more improved implements of modern husbandry: at the latter is a very skilful workman from the neighbourhood of Trentham: and it is strongly recommended to them, that the persons who have been thus established should take their apprentices entirely from the lads of the country; so that there can be no doubt there will be a rapid improvement in this respect.

It is in the management of their stiff lands, that the tenants are most defective. Of late, however, they have made so great exertions in draining their lands, that it is hoped they are beginning to adopt a better system. The defect of their management consists in their ploughing very shallow; the effect of which is, that the depth of soil is not sufficient to protect the roots of the plant from being chilled with the cold and wet (which is upheld by the impervious nature of the subsoil) when the ground is wet, and exposes it to the too rapid action of the drought when the weather is dry. To

plough deeper is, therefore, the first, the most simple, and the most important improvement which can be adopted in these soils.

They also, until lately, hurt these cold lands by making use of a large quantity of a bad sort of red clay marl, which they dug out of every field. The effect produced was, to increase the tenacity of the soil, and to render it still less fit for the purposes of agriculture. Of this fact, all the intelligent part of the tenants are themselves convinced, though some of those who are still wedded to their old customs, lament the regulation which prohibits them from using this article. On those farms, where the inclosures have been been entirely renewed, and where, in consequence, a portion of several of the ancient inclosures have been thrown into one close, the bad effects of this system of marling is perceived in a remarkable degree, and a distinct line in the appearance of the crop, points out with precision the land which had been formerly so treated, from that which had not. The best example of this fact is to be seen on the farm of Redhill, in the

parish of Sheriffhales, county of Salop, in the occupation of Mr. Thomas Shuker, one of the most industrious and enterprising tenants on the estate. The consequence of this prohibition has been, that the tenants have applied themselves much more to the use of lime as a stimulant, which has repaid them, as might have been expected. It has also put a stop to the rapid deterioration of the property which was occasioned by the digging of the pits which every where disfigure and destroy a considerable portion of the farms of this district.

To level down these pits, and to render them again fit for the purposes of husbandry, has been an object of great attention. In this way there was applied the labour of a great proportion of the parishioners, to whom, from time to time, employment had been afforded, in those years when the circumstances of the country rendered such an exertion of the landlord's bounty necessary. This was more particularly the case in 1817; in which year a vast body of men was employed on each of the estates, being the same year that it was necessary to make so great an exertion in favour of the small tenants in Sutherland.

In another particular, the management of the stiff soils might be considerably amended; which is, in the mode of working the fallows, which are left too generally to grow full of weeds, in place of being cleaned as they ought to be. The muck, also, is laid on at an improper season of the year, by which its good effects rather go to encourage the growth of weeds, than to improve the crop. The fact is, that until lately, no person of better capital, or of superior skill, was willing to undertake the cultivation of a farm composed of stiff land, if one of another quality could be found. The quality of the land of this description in Shropshire, is inferior to that in the better districts of Staffordshire; and the quantity of land fit for the turnip and barley husbandry being of a superior quality and of considerable extent, the cultivation of the heavier land, and its improvement, was entirely neglected. At Trentham, the strong soils are of a far superior quality, fit in every respect for the most improved system of wheat and bean husbandry. But the lands were so much subdivided, and the capital of a large proportion of the tenants, until lately,

was so inadequate to the right cultivation of their land, that no improvement could take place, or be expected, and this estate remained stationary, amidst the general progress which was so conspicuous in the other parts of the county. These defects have been remedied in both instances; and the introduction of some skilful farmers into Shropshire, from the more improved districts of Staffordshire, to manage the wet lands, and the selection of some improving individuals from Shropshire and Cheshire, where necessary, at Trentham, has given rise to that spirit of enterprise which at present characterises the tenants of these estates, and which must prove so beneficial to the country, by the additional surplus produce which will be brought to market.

The rotation which they followed, on both estates on the stiff soils, was,—fallow, wheat, oats, clover. That is now altered, by clover being substituted after the wheat; and an attempt has been made to induce them to try a six-shift course of husbandry, by introducing beans into their rotation. Little progress, however, has, as yet, been made in this experiment. To this they have con-

siderable objection, which arises from the defective mode of cultivating their bean-crop. In the first place, they are unwilling to sow them in drills. They are, besides, longer in planting them, and allow them to stand later in the year than they ought to do. The consequence is, that their crop is often damaged, and the nutritious matter of the bean-straw is entirely lost. They cannot be persuaded, therefore, that it forms an excellent and nourishing food for horses and cattle; and the complaint that they make of its being an exhausting crop is quite correct, in consequence of their permitting it to stand so long upon the ground.

This system of agriculture has been better practised by Mr. Richard Ford, of Newstead, near Trentham, than by any other of his Lordship's tenants. It is impossible, however, to exceed Mr. Ford's exertions in every particular, as will be noticed in the Appendix.

In discussing this subject, it must also be stated, that the evil of over-cropping and having a larger proportion of land in tillage than proper had infected the occupiers of

Lord Stafford's estates, in common with the rest of the country; the high prices of grain inducing them to throw every thing under the plough, — a circumstance which the owners and the occupiers of land, and the country at large will long have to lament. The average rate of produce has been much reduced in consequence; and it would be curious to examine whether, abstracting the new land which has been brought into cultivation under the various inclosure acts which late years have given rise to, much has been added to the produce of the country, from the increased number of acres converted into tillage by the destruction of old pastures. This evil has begun to cure itself. A large proportion of each farm is in the course of being laid down to pasture, and regulations have been adopted for preserving it in that state.

Notwithstanding, however, these observations, it is supposed that few estates can produce similar exertions upon the part of the tenant, or similar encouragement on the part of the landlord. On the Trentham estate, in the course of the last two years, there have been executed, either by the one or the other, ONE HUNDRED AND THIRTY-SIX

THOUSAND yards of under-ground draining; ONE HUNDRED AND TWENTY-SEVEN THOUSAND yards of ditches either new cut or deepened and scoured. On the Lilleshall estate, in little more than the same space of time, there has been executed about SEVENTEEN THOUSAND yards of embankment; TWENTY-SEVEN THOUSAND yards of water-courses deepened and scoured; FORTY-SIX THOUSAND yards of main ditches made or deepened; THREE HUNDRED AND FIFTEEN THOUSAND yards of fence-ditches deepened, scoured, and straightened; FORTY-NINE THOUSAND yards of old fences stocked; THIRTY THOUSAND yards of new quick fences made; TWENTY-ONE THOUSAND yards of turf-draining; and FOUR HUNDRED AND SIXTY-TWO THOUSAND yards of under-ground draining, laid with tiles and filled with stones.

An allowance of draining tiles is made, wherever the exertions of the tenants seem to merit such a reward. In order to secure the drains being properly filled up with stones above the tiles, the tenant is obliged to drive a sufficient quantity of stones or cinders from the furnaces, and lay them on the ground, previous to an order being made for the delivery of the tiles. Without

attending to this important circumstance, much draining would be thrown away. The park at Trentham is a complete illustration of this remark. The draining of this spot was conducted under the direction of the late Mr. Elkington. The wetness, with which these lands are affected, does not arise from any line of springs bursting out from the upper grounds, to which that gentleman's system of deep drains could be applied; but is occasioned almost entirely by the retentive nature of the subsoil, and from its being intermixed with small basins of sand, which lie detached and unconnected with each other, in the bed of clay. To cure this species of wetness, a number of small drains, well filled up, with one cut into each of these beds of sand is necessary, in order effectually to cure the evil.

In pursuance of this plan, a great part of the park at Trentham has been lately drained over again, by making a number of small shallow drains, about fifteen feet asunder, in some instances above the old ones, taking particular care to fill them up as well as possible, and *not to permit any clay to be laid above the stones.* This

has proved effectual. There is nothing so little attended to as this very simple, but most necessary rule. The tenant grudges the necessary expence, and wishes to avoid any labour beyond what he conceives necessary for his *immediate* interest. The value of an active and zealous steward or bailiff, is more felt in attending to the due execution of such permanent improvements, (where stipulated to be done by the tenant,) than in the discharge of any other part of his duty. This has been very effectually done in the present case by Mr. William Lewis, Lord Stafford's steward. He deserves much commendation for the manner he has carried into effect this and all the other improvements on the estate, which have been intrusted to his immediate direction, in which he has been well seconded by Mr. John Penson, who had the charge of them at Trentham, and his son at Lilleshall; a family originally Flemish, and who have been in the service of the Leveson family from father to son, since the days of the Armada. It would be doing injustice to their disposition and their exertions, not to add, that it is im-

possible to have a more zealous set of persons than Lord Stafford has in his employment.

One improvement the tenants have paid much attention to, and a more valuable one they could not adopt, which is the construction of water-meadows. They have lost no opportunity in making use of whatever water they could obtain for this purpose. They were allowed the rough materials to construct the flood-gates, and the example was shown them as to what could be done in this respect to a very great extent at Trentham. The value of this improvement is well known to every experienced agriculturist in England, and no opportunity should be lost in taking advantage of every circumstance to promote its adoption. There has been lately finished, a new water-meadow on the home farm at Trentham, at the expence of about TWENTY POUNDS an acre, which will now let for near FOUR POUNDS an acre, besides the advantage derived to the adjoining upland. This meadow was not worth ten shillings an acre, previous to such an improvement. It consists of a small deep dingle, with

steep banks, in which a copious spring rises near the top; the upper part being formed into a fish pool. From this head the water is conducted on the different levels on each side, with the proper catch-water drains carrying the water round the various knolls. The whole being adorned by some fine trees, it forms for its extent a very perfect union of useful and ornamental farming. It shows how much may be made of such a piece of land, incapable of any other sort of useful occupation; and points out how much valuable land might thus be reclaimed in every glen in Scotland, and applied to the most useful purposes, if a strong disinclination to try this experiment, did not as yet oppose this species of improvement in that country.

Much money, however, in this neighbourhood has been thrown away by watering land, which has not been previously thoroughly drained; this latter improvement is the foundation of all others. Another mistake has also been fallen into, by attempting to convert into water-meadows peat soils, without first bringing them

to a proper state of consistency by means of repeated heavy rollings, and top-dressings. A proportion of TEN acres of water-meadow to every HUNDRED acres of pasture or arable land, adds at least two shillings and sixpence an acre to the value of every acre of such a farm, in addition to a fair rent being put upon the meadow.

It is certainly to be lamented, how unwilling the very skilful farmers in the North are in general, to attempt any experiment which has for its object the improvement of grass lands except by culture; and that the almost universal practice of breaking up old turf, (which they at one time, unfortunately, induced some English landlords to attempt,) is the only resource they have to improve their pastures.

From these observations must be excepted a portion of the county of Lanark, where, owing to the exertions and precepts of Robert Brown, Esq. the gentleman who has the general management of Duke Hamilton's affairs, the good effects of this improvement is beginning to be understood and carried into practice. To this gentleman's great exertions, various parts of the island

are much indebted for their improvement and great prosperity. It is conceived, that no where would the application of water be more beneficial than in the hills of Sutherland, where the effects of the irrigation would be to destroy the heath completely, and to substitute kindly grasses. In support of this opinion, it may be remarked, that wherever a spring rises on the side of a highland hill, the edges of the stream are surrounded with grass. A more convincing proof, however, is found in the same effect being produced by the small rills which are conducted along the mountain side, to some retired and concealed spot, for the purpose of illegal distillation. The experiment is in progress.

The state of the fences on these estates is not in general good; they are liable to the same general objection which is applicable to a great proportion of the counties of England. They are not composed of quick, at least but in a scanty degree; they for the most part consist of bushes, growing from the stump of every sort of forest-tree, intermixed with hazel, birch, hornbeam, maple, alder, willow, &c. They

are planted on high and dry mounds, and thus are subject to constant decay. They occupy too much ground, provided agriculture alone was the occupation of life. But, as they give great protection, when they thrive, to the game, they become an important object of preservation, inasmuch as every thing must be of consequence which contributes to the sport, and has the effect of retaining the gentry of England much upon their estates. For this reason it may occasionally be proper to consider of the best way to preserve these hedges at the least expence, in place of substituting more perfect ones in their stead; — nor should one object exclusively be attended to in the agricultural improvements of so great and so wealthy a country. In this point of view, it appears very doubtful how far the indiscriminate enclosure of commons, arising out of the high nominal prices of grain, has been in every instance of advantage to the nation. Many of them, certainly, could never pay the expence of obtaining the act, — of the commissioners' fees, — of the construction of the fences, — and of bringing the land into cultivation.

In this respect there has been a dead loss of capital to the country. It is conceived that it is not carrying this feeling too far, to regret the destruction of some of those beautiful and picturesque forests and chases which once surrounded London, and to hope that this may go no further. It may even be permitted, perhaps, to include within this regret as a national loss, the destruction of Windsor forest, the most appropriate accompaniment of the noblest royal residence in Europe. The preservation of some of these chases is as essential to the poorer classes of the metropolis as to the rich. To the former they afford health, exercise, and amusement; in the latter they produce and cherish that love of the country, and of rural sports, so important in a constitutional point of view. They nourish that feeling for, and knowledge of the beauties of nature, (freed from the love of gain as connected with the productions of the soil,) which enlarge our understandings, and exalt every better sentiment of the heart, encouraging the practice of the social virtues, and checking those more selfish habits, which the general distribution of great wealth is too apt to engender.

There cannot be a doubt that not only for these reasons would the abstaining from some of these enclosures have been beneficial, but, in an economical point of view, it would have been most advantageous to the nation. In how many ways could not the capital, thus lost, have been beneficially applied, both for the individual and the country! How much a richer man would the land-owner have been, if he had saved much of this expence, and permitted a more liberal importation of foreign corn! How much better would it have been for the country! In this, as in every other instance, it might be demonstrated, that that which would have been best for one, would have been so for all, and that the same system must always benefit equally the English landlord, tenant, merchant, manufacturer, and artisan. But, perhaps, we have here to regret another effect of the late depreciation of our paper currency. In another and most important point, these enclosures have had a very material effect on the habits and manners of the people, especially in the vicinity of large towns, by depriving them of the means of enjoying those sports, and healthy and

manly exercises, which contributed alike to keep the body and the mind in a vigorous and healthy state of action, and in no way incompatible with their education or good morals. This, however, is now lost, and the public-house, or other much less innocent occupations have succeeded those customs which nursed our ancestors in the love of order and attachment to their landlords, and which produced that intercourse and good fellowship among all ranks, which was the glory of the country. But to return from this digression.

When it is necessary to plant new quick-sets, the practice followed is far from being perfect. The largest plants are selected from the nursery rows, where they have been permitted to remain many years, and have been drawn up without having any lateral branches. These plants are put into the ground as they are taken from the nursery, without being cut over, the roots are naturally injured to a certain extent in transplanting, and are not capable at first of affording sufficient nourishment to the maintenance of the vigorous growth of the entire bush. They therefore grow ill for some time, and it is seldom that they come

to be strong hedges, which a contrary treatment would render them. Another practice is adopted, very injurious in its effects; which is, the custom of cutting over the most healthy hedges in their full vigour, and while they form the most perfect fences. In order to make it answer in the mean time as a fence, until the quicks grow again, a very few of the strongest stems are left, which are laid down and twisted in with a quantity of trowse, supported by stakes driven into the ground. The effect of this is, that the dead trowse and wood completely checks the growth of the young shoots, wherever they interfere, and numerous gaps are the consequence. It is a *rule that ought always to be adhered to, which is, that dead wood or trowse should never* be permitted to come near the growth of young quicks, — they cannot bear it. It often happens, that in addition to this a dead fence is put up to protect the young thorns. This is almost invariably put too near the living fence, by which the growth of the lateral shoots is entirely destroyed. This custom is universal in every part of the island wherever quicks are reared. It is

wonderful that a practice so glaring in its effects, should remain so long without being corrected. In filling up gaps in hedges, strong healthy plants of considerable size should be used, great care being taken to dig the ground well, and whenever it is practicable, some new soil and manure ought to be added; particular attention, moreover, should be paid that the roots are as little injured in the operation as possible. Another bad custom in regard to this branch of practice ought to be avoided, which is, that the rail to protect the gap, should not be placed in the line of the fence. By doing so, both ends are generally stuck into the old quick, the gap is by this means enlarged, as the thorn rapidly grows away from the touch of the dead timber, and the young planted quick suffers in a similar manner. It is evident, moreover, that this mode of fixing the rail, affords no protection to the young thorns from the browsing of the stock. The same reasons afford powerful arguments against the practice of filling up gaps with dead trowse.

The hedge-row timber on these estates

is of no great amount. There is no change in the rural economy of England more to be regretted, than the neglect which is now shown to the cultivation and growth of this species of timber. The injury which it does to the cultivation of the land is much exaggerated, especially if a proper selection of trees is made, but even the growth of the ash, so formidable to agriculturists, might be defended on the ground that without it the best implements employed in the cultivation of the soil could not be made. It is well known that good hedge-row timber is by far the most valuable both for naval and domestick purposes. Its superior toughness rendering it equally valuable to the ship and to the ploughwright. The value which it is of, in affording shelter, is also of material use; besides, the raising of grain is not the only purpose of life, or the only matter to be attended to, nor the only object worthy of attention. The purposes of war and of national glory, the protection and the extension of our commerce, the construction and repair of buildings, and even the enjoyment arising from the rich and beautiful effect produced by such

decoration and ornament, are all objects of material importance to the well-being and constitution of a highly cultivated state of society. Even upon the more narrow basis of individual utility, this practice might be defended and recommended; for it is not useless to consider how many families and estates have been preserved, when pressed by temporary difficulties (from which none are exempted) from a fall of hedge-row timber. One of the best legacies which a great proprietor can leave his country and his family, is an estate well stocked with such trees.

On the subject of the treatment of hedge-row timber and the management of hedges, a short publication of Mr. Blaikie's, of Holkham, is recommended as full of sensible observations. It is printed for Harding, in St. James's Street.

To give a detailed account of the improvements which have been executed upon these estates would be impossible, and indeed such a statement would be neither useful nor acceptable to the general reader. In justice to the individuals, however, by whom these im-

provements have been made, and as an encouragement to the exertions of others, an outline of what they have done is given in the Appendix, No. IX. Of the farms which have been *selected* as deserving notice, five are under 100 acres in extent, 29 below 200 acres each, 29 below 300, 12 below 400 acres, eight below 500 acres, and three above that amount. The improvements on these farms are well worthy the inspection of the practical agriculturist.

The necessity of good roads as the first and most important step in the progress of any country, is now too generally acknowledged to need any argument to show, that until they are put into a sufficient state of repair, no other step can with justice be expected. Without them every improvement is either absolutely impracticable, or is undertaken under such disadvantages, and at such an increased expence, as to operate in the most decided manner to discourage them. The estates now under consideration, laboured under these disadvantages to the utmost. The construction of new, and the repair of the existing roads, was a matter of

serious expence and much difficulty, as, except in a few detached places, no good materials for the purpose could be got. The natural consequence was, that the cultivation of the more remote districts of these estates was much retarded, and experienced many obstacles from the almost impassable state of the roads, both publick and private. The wet lands, in particular, suffered much from this circumstance; as it was hardly possible either to get muck or lime upon the land, or to get the crops to the rick-yard. These lands, therefore, were abandoned to the worst system of management, and they were cropped from time to time without ever being manured. To improve these, his Lordship began with the township roads. Wherever it was practicable they were straightened and made in a manner superior to what had ever been before practised. In every case the ground was given up by his Lordship. To such an extent has this been carried, that above one-third of the publick roads on the estates, comprising many miles, have been newly laid out, and all of them sufficiently repaired.

In considering this branch of the subject, it naturally occurs to remark that nothing can be more defective than the system of management applicable to the township roads of England. The appointment of an annual surveyor, perfectly ignorant of the science of road making, and who is himself a party deeply interested both as to the amount of labour applied, and in the location of that labour is certainly not the best description of person to select for such a charge. No regular plan or uniform system can be expected from a set of officers thus annually changed. The money therefore which is expended, must, in nine cases out of ten, be misapplied. The attention of the surveyor is necessarily occupied with his own affairs, and he generally endeavours to benefit his farm in the outlay of the publick money, without having any intention of doing that which is incorrect or improper,—each man taking this in his turn. In place of the roads being repaired at the time best suited for the purpose, or when they require it most, this work is performed at the time most convenient for the farmer,

though probably the least fitted for the road. There is thus a vast and unnecessary expenditure of labour and of money. The persons employed in this work have little or no interest in the mode in which it is executed, which leads still further to the mismanagement and misapplication of the funds. Labour in kind should be universally abolished, and an adequate payment in money substituted in lieu of it. By such an arrangement, now adopted all over Scotland, the repair of the highways would be economically and efficiently performed, by being executed by men accustomed to such work, and by being always performed in proper season, and from time to time, as required. This plan would at the same time be a great relief to the persons liable to perform such duty, and would lay the foundation for the reduction in the number of unnecessary horses used in agriculture, one of the most serious expenses now incurred by the English farmer. The extent, besides, of each local jurisdiction is too limited to admit of any improvement generally advantageous to the country. If a hill is to be avoided by going round it, the expence of the alter-

ation is either beyond the township funds to accomplish, or above the comprehension of the surveyor to execute. The necessary alteration, moreover, may be situated within two or more townships; to get them to agree to one combined plan is not to be expected.

Nothing requires more skill and continued attention than the repair and management of roads, yet this important duty is generally cast upon the old and the decrepid. There should be more power vested in the surveyors, who should be permanent officers — the districts should be more extended — a portion of the labour of each township, or its value in money, should be applicable to any part of the district, — and a set of young, active, and experienced men should always be employed. In no part of the political economy of the country could so great an improvement be made as in the laws regarding the highways, and, in few particulars, would there be a greater saving to the agricultural interest, arising as well from the improved state in which the roads might be put, as by a diminished expenditure, arising from the appointment of per-

manent surveyors, regularly brought up in the knowledge of road making, to whom considerable districts ought to be entrusted.

In this respect the country is under infinite obligations to Mr. Protheroe, for the pains which he has taken to draw the attention and consideration of the publick to the state of the turnpike roads in England, and the nature of their management; and as there seems to be every reason to expect that the labours of the committee of the House of Commons, of which he was chairman, will be attended with success, it cannot be doubted that the state of the highways, and the management under which they are placed, will undergo a similar revision. Even if no legislative measure should be founded on these proceedings, the attention of the publick is so thoroughly turned to the subject of the repair of the turnpike roads all over the island, that a new era in their management may be said to have actually commenced, from which the best results must flow.

In order to secure these advantages, as far as it is at present practicable, it was recommended to the different townships,

in which Lord Stafford's properties are situated, to apply to the magistrates of Staffordshire and Salop, to appoint a permanent assistant surveyor. A young man was sent down to learn the method pursued in constructing those roads which are made through Wales. Mr. Telford was good enough to direct he might see whatever was going on. The magistrates have been pleased to appoint him to this situation, and at Lilleshall fourteen townships have been put under his management. At Trentham, the immediate presence of the steward controls and directs the application of the parish labour. It will, of course, be some little time before the benefits of this system will be perceived.

The next object of attention was the construction of private roads through such parts of the estate as required it most, and this has been done to a very great extent. The difficulty of obtaining good materials has already been stated as the great obstacle to the improvement of the roads on these estates, especially in Shropshire. In order to remedy this in the years 1816 and 1817, a great number of those parishioners for whom work was provided, were employed

in quarrying stones, &c. Rails were then procured, and these stones, or cinders, obtained from the iron works, were conveyed by the people to such places as they might be wanted, for the construction of roads. In this way during those two years, many miles of road were completed both in Staffordshire and Shropshire, which have proved of the greatest benefit to the estates.

The lower and most inaccessible parts of the estate at Lilleshall, are now intersected by good hard firm roads, and there is hardly any part of it which cannot be approached with ease: the effect of which has been, in fact, to add so many acres to the estate; as by means of these roads, there now is, in all weathers, the easiest and readiest communication for the conveyance of lime and manure, and for getting off the crop. The effect is already most evident, especially upon the Lilleshall-hill, Cheswell and Honnington Grange Hincks, Lubstree-park, and Butterey farms.

These roads the landlord repairs by means of his own workmen, charging the different tenants, benefited thereby, with the amount.

In the same manner, under the inspection of the landlord's surveyors, an annual repair is given to all the buildings upon the estates. Where the matter to be repaired has been occasioned by the fault, or has arisen from the negligence, of the tenant, he is charged with the whole expence. Where it has occurred from ordinary tear and wear, the materials are furnished by the proprietor, and the tenant pays for the workmanship. This keeps every thing in correct order and good condition, and by this constant attention, much labour and expence is saved, as every defect is cured almost as soon as it occurs, and long before it can have produced any permanent injury.

The most considerable work executed upon these estates, is the drainage of an extensive district in Shropshire, called the Wildmoors. The extent and nature of this improvement is such as to deserve a particular and detailed description. Some adjoining properties have benefited by this work, and contributed to the expence of it, which was done under the authority of an act of parliament. But as almost the whole

of the land belongs to this estate, and the expence being chiefly borne by it, the direction of its progress, and its preservation hereafter, is entirely vested in a surveyor chosen by Lord Stafford.

These moors consisted of an extensive tract, amounting, with the land similarly circumstanced, to near twelve hundred acres. The soil is composed of a fine black peat, incumbent on a bed of red sand full of water. They are bounded chiefly by the upland part of these estates, and surround the parish of Kynnersley, which also belongs to it, and which is composed of some of the finest turnip and barley soil in the kingdom. They had evidently formed the bottom of an extensive lake. The different brooks from the surrounding country held their course through them. These brooks are known in the country by the name of *Strines*, being distinguished from each other by the name of the places from which, or past which, they flow. Their course to the Tearn, (which river drains the whole of this country into the Severn,) was devious and crooked in the extreme, injuring to a great extent the land through which they ran.

A great proportion of these moors was occupied by the tenants of the adjoining farms, who turned their stock in upon them for a portion of the summer season only. During the rest of the year it was impossible to use them. They afforded but a small quantity of food, and were in most places so wet, that it was at all times difficult to walk over them, it being necessary to select the hardest places to step on. They were covered with water after almost every severe rain, owing to which the inhabitants of the neighbourhood were subject to frequent attacks of ague. The adjoining lands, besides, to an extent exceeding six hundred acres, were kept in nearly a state of nature, owing to there being no level by which they could be drained, while this extensive district continued subject to such inundations.

The difficulty which occurred, in draining this tract of land, arose from the want of level, and from the river Tearn being pounded so high by the mill pools, as to throw the water back to a great distance upon the land. The plan for draining this extensive district was extremely well conceived, and judiciously laid out, in the double

view of securing this object, and of interfering as little as possible with private property and the existing establishments situated on the Tearn. It was suggested by John Bishton, Esq. the first commissioner under the Act. The great object was to gain as much additional level, as would create a run throughout the whole extent of the moorlands. This was to be obtained by beginning the cut which was to carry off the water a considerable way lower down the Tearn than the water had hitherto been discharged into that river, and a good deal below the mill-pool at Long, which occasioned this poundage. The original courses of the Strines were straightened and widened, but they were still made to convey the water from the uplands, and to discharge them into the Tearn in their original direction. To prevent them overflowing the adjoining lands, and to cut off the effects of the back poundage of the Tearn on the upper moors, these brooks were embanked for the whole length of their course through the wildmoors. These are technically called argue banks. At the back of these banks deep ditches were carried, but in a

more direct line than the course of the Strines. Into these ditches the drainage of the moor-lands is emptied. The level which was thus brought from the river Tearn, from below Long Mill, was carried in a tunnel under the Shrewsbury canal, and was conducted below the several Strines in syphon culverts, and thus communicated with the ditches described, as having been made behind the banks which confined the waters of these brooks.

In some instances, it has been necessary to construct one set of culverts over another, in order that the waters coming from the uplands may be kept in the several brooks through which they had constantly flowed, and that this water flowing from the uplands might not fall into the back drains; it being again explained, that the water flowing from the higher grounds is still confined to the original strines or brooks on an upper level; the drainage water alone of the moor-lands being thrown into the back drains. Thus has a great additional level been obtained, and the whole of this district is now entirely relieved of water, and such a thing as a flood

has not been known for years. This district is, in some instances, so flat, that the old course of the Preston strine, which formerly conducted the water of that brook in one direction, has, with little difficulty, been made a part of the drainage, and to carry the drainage water in exactly the contrary direction. A new channel having been cut for the strine.

Taking advantage of this drainage, main ditches, upon a regular system, have been carried into all the neighbouring parts of the estate, thereby enabling the landlord and the tenant to execute those improvements which have been before referred to, and of which a particular account is given in Appendix IX.

This district has been subsequently divided into regular enclosures, by great ditches, which fall into the main drains; and, wherever it has been possible, these ditches have been made to serve this purpose, as well as that of a fence to the new roads which have been constructed across these moors. In one instance, one of these roads has been carried in a straight line for about two miles. On each side of this road trees

have been planted, at regular distances, which will soon form one of the finest avenues in England. These moors have besides been all regularly under-drained by turf drains, which stand remarkably well. In the different ditches are placed flood-gates, to pound back the water during the summer, preserving the meadows in a state of perpetual verdure. The water is let off at least once in every fourteen days, and being drawn off with as much velocity as possible, it scours and keeps clear both the ditches and the underground drains;—the mouths of these latter are all defended with tiles. The moorlands have been infinitely improved by very heavy and repeated rollings and top-dressings; and their value as let to a farmer, in many instances, is fully doubled. This improvement has cost a very large sum of money; which was encreased beyond what was necessary, owing to the inefficiency of the late surveyor belonging to the commission, which is not yet closed. The drainage, however, has lately been put under a surveyor approved of by Lord Stafford, (Mr. Lewis,) in terms of the Act, and

the expence is diminished, and the whole put in better order. A very rapid improvement has taken place on these lands. In place of being the very worst part of the estate, they are rapidly becoming equal to the best and finest meadows on it. In order to shelter them from the blasts which come round the Wrekin, from the Welsh mountains, they have been intersected with various plantations. * A plan of the Wildmoors previous to, and another subsequent to this improvement is subjoined. † They will serve to give an accurate notion of what has been done. The whole being well worthy the examination and inspection of an intelligent agriculturist and improver. They connect, moreover, with two other plans of a portion of the parish of Lilleshall‡, and by comparing these four together, a very accurate notion may be had of the manner in which these estates were heretofore held.

* Upon the Shropshire estates there have been planted, within these few years, above HALF A MILLION of trees, and nearly THREE HUNDRED THOUSAND quicks. At Trentham about TWO HUNDRED THOUSAND trees, and in Yorkshire about THREE HUNDRED THOUSAND.

† Plates 8, and 9. ‡ Plates 10, and 11.

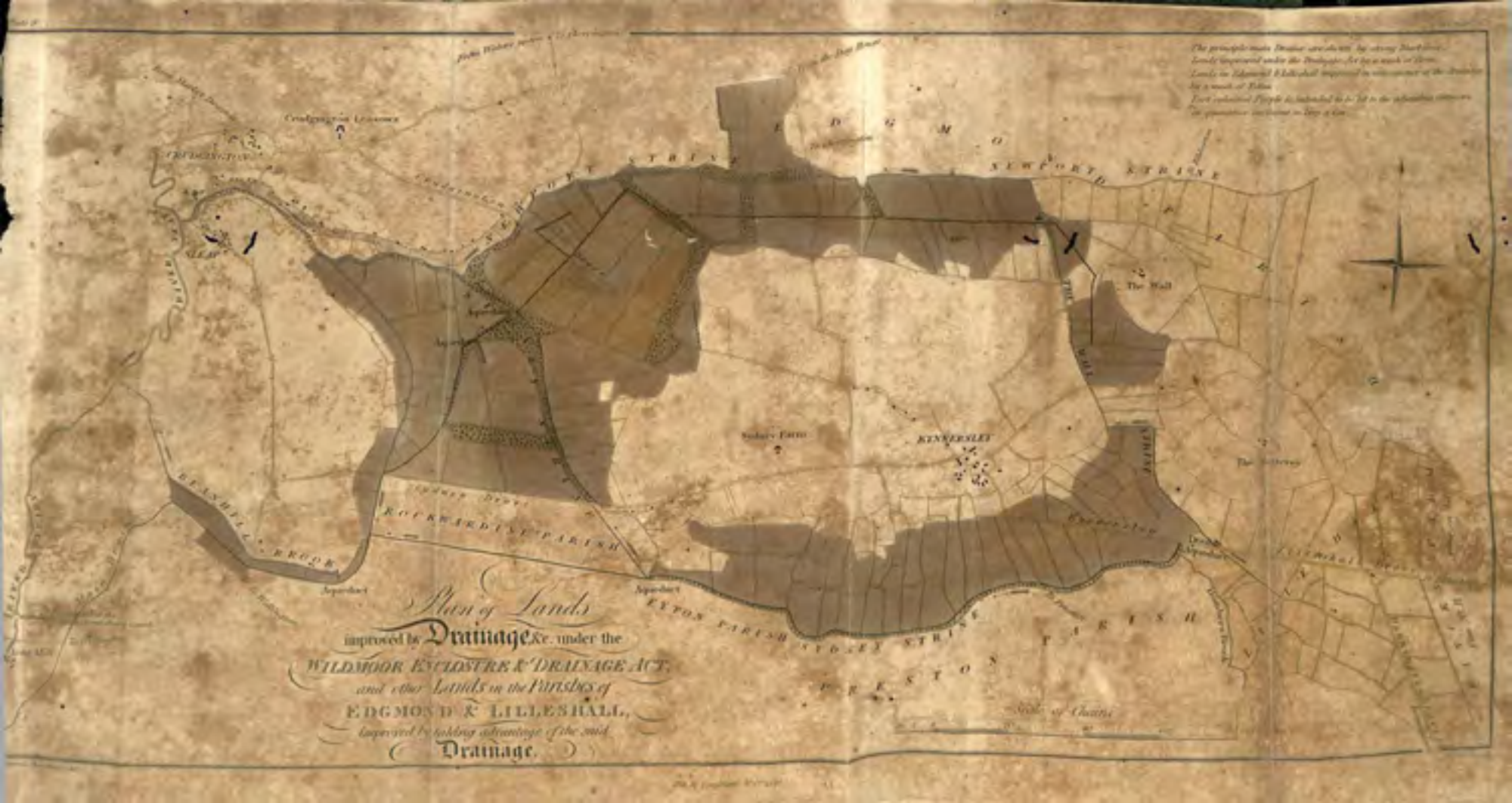
Plan of Lands in the Parishes of HIGH ERCAL, KYNNERSLEY, EDGMOND, LILLESHALL, &c.

Prior to the

WILDMOOR ENCLOSURE & DRAINAGE.

the Property of

The Marquess of Stafford K.G.


Plan of Lands
improved by Drainage &c. under the
WILDMOOR ENCLOSURE & DRAINAGE ACT,
and other Lands in the Parishes of
EDGMOND & LILLESHALL,
improved by taking advantage of the said
Drainage.
EDGMOND
NEWPORT STRINE
NEWPORT PARISH
The Wall
KINNERSLEY
Sydney Farm
ROCKWARDINE PARISH
BEANHILL BROOK
EYTON PARISH
SYDNEY STRINE
PRESTON PARISH
Sydney Drain
Aqueduct
Scale of Chains

LONGFORD PARISH
Plan No. 5 joins on here
THE HINCKS
CHESWELL GRANGE
Glebe Land
Glebe
Hector
HONINGTON GRANGE
DONNINGTON
PARISH
PRESTON
Plan
PART OF THE LANDS
in the
Parish of Villeshall
Belonging to
THE MARQUESS or STAFFORD, K.G.
1810
Previous to the Survey
Newly arranged
The different occupations are distinguished by the figures.

LONGFORD PARISH
PART of BUTTEREY FARM
Lilleshall
THE HINCKS
LUBSTREE PARK
King Street Road
HONINGTON GRANGE
DONNINGTON
PLAN
of
Part of the Lands
in the
PARISH or LILLESHALL.
Belonging to the
1820.
The Hincks farm occupied by Robt Pearce coloured Brown No 1.
Chiswell Grange occupied by Thos James coloured Green No 2
Part of Honington Grange occupied by J Dunwell coloured Red No 3
Donnington farm occupied by Jos Bayeot coloured Purple No 4.
Lubstree park farm occupied by Ann Higgins coloured Blue No 5
The Lamy lakes occupied by the Lilleshall Co coloured Yellow No 6.
The parts uncoloured are held by Lease for lives and which as the terms expire will be thrown into the Adjoining farms by comparing the size of these fields with the larger ones and by regarding their detached Situation from each other the merits of the two arrangements will be clearly seen and easily estimated.
The Glebe by an exchange is united in one place

Being a very good specimen of the mode of occupation at one time prevalent over a large portion of the kingdom, (now happily nearly extinct,) as well as of that arrangement which has been substituted in its stead.

The great outline of the improvements on the English estate, as well as on the Scotch, will be completed by the end of the present season. That which remains to be done in both countries is regularly chalked out, and arranged, but, as its execution depends upon the falling in of the leases, the outlay for the future must be gradual, and cannot be considerable.

The attention of the landlord was, however, by no means confined to these objects. His influence has been used in whatever way it could be employed beneficially in extending the comfort or advancing the good behaviour of his cottagers; a conduct so characteristick of the great and wealthy proprietors of these kingdoms, that it must ever distinguish them in the history of human benevolence.

Schools, wherever they have been necessary, have been encouraged, either aiding

them by subscription, or by granting the accommodation of school-houses. Two Banks for Savings, one at Lilleshall, and another at Trentham, of which Lord Stafford is the treasurer, have been established, and the whole details are conducted by his managers, assisted by the parochial clergymen, and the principal tenantry, and their success among the agricultural labourers has been very gratifying.

During the residence of the family at Trentham, there is distributed daily, to every poor object, who is travelling along the road, and who applies for the same, a portion of good wholesome bread, in quantity about fourteen ounces to each full-grown man, and less in proportion to women and children, with a pint of good table-beer. The number of people who received this donation in 1819, amounted to NINE THOUSAND FIVE HUNDRED AND FOUR men, TWO THOUSAND THREE HUNDRED AND SEVENTY-SIX women, and SEVENTEEN HUNDRED AND EIGHTY-NINE children, consuming FIFTEEN HUNDRED AND NINETY loaves, and SEVENTEEN HUNDRED AND THREE gallons of beer. From this charity are excepted all soldiers and sailors

receiving the King's pay, all persons residing within the parish of Trentham, or in its immediate vicinity. Other distributions take place on particular occasions; for example, to those who reside in the parish, annually on St. Thomas's day, there is a distribution of a certain quantity of beef to the poor. During 1819, there were TWELVE THOUSAND, SEVEN HUNDRED AND EIGHTY-FIVE quarts of rich soup, and above EIGHT THOUSAND FIVE HUNDRED quarts of milk distributed within the parish, besides FOURTEEN THOUSAND ONE HUNDRED AND THIRTY-FOUR quarts of milk given away under the head of allowances. Such facts are strongly illustrative of the beneficial effects derived to the poor, from the residence of the great families of England, on their respective estates;—no other country affords an instance of the same kind.

The foregoing statement would have been given with some hesitation, had not the facts been of a nature rather to exhibit and illustrate the character and extent of the charities distributed by the great families of England in general, than as being at all

peculiar to the instance to which the details belong. And these facts may help to explain to foreigners the nature of the connection which exists between the richer and poorer classes in this country.

The town of Lane-End, one of those which compose the Staffordshire Potteries, is partly situated on, and is partly contiguous to the east end of the Trentham estate. The inhabitants being ill supplied with water, carried in barrels, they petitioned to be provided with this necessary article, which request has been complied with; and this town, after a very considerable outlay, now enjoys a regular supply of water, conveyed in iron pipes.

The character of the numerous cottagers upon the estates, is also an object of great solicitude, and without any interference with the manner in which a man may choose to occupy himself, their regular and decent behaviour is made the subject of care and attention; and the steward has strict directions to watch carefully over them, and where possible to promote their improvement. Wherever a potatoe garden can with advantage be added to their cottage, that

accommodation is afforded them. In the vicinity of Trentham, the cottages are of the best sort, and with their gardens kept in the nicest order. To almost every one of them is attached land for the maintenance of one or two cows. In the neighbourhood of Crudgeington, each of the most industrious families have had let to them land sufficient to keep a cow, in situations not particularly applicable to the purposes of the neighbouring farms. Steps have been taken to do the same thing at Ketley, and wherever it is practicable. In no part of the duties committed to his charge has Mr. Lewis shown more activity and zeal, than in executing the directions he has received, in regard to the care to be paid to the character, conduct, and comforts of this class of tenants. It is a circumstance worthy of remark, that of all the labourers who possess a cow, none receive relief from the poor's rate, except one widow at Trentham, who has a large family, and even in this instance, the relief she receives is in a less ratio, than any person labouring under similar difficulties.

Thus much, it has been thought necessary to say, in explanation of the real and extended benefits which Lord Stafford has conferred on every one who could be considered as having a claim upon his consideration, or within the sphere of his influence. Yet however much private feeling might have dictated such a wish, so much would never on any account have been said, if the circumstances already mentioned had not called for it, in consequence of the attention of the publick having been already solicited, and in some instances granted to the false and malicious accounts circulated with so much industry, in respect to the improvements in Scotland. In doing this, it was quite fit to show, at the same time, that such improvements had not formed the exclusive subject of his Lordship's attention, but that his English estates, and his English tenants, of every class, had equally been, and at the same time, the objects of his solicitude.

But, in bringing these observations to a conclusion, it is perhaps as well to observe, that notwithstanding what has been said in approbation of the exertions of the different individuals, whose improvements have

been noticed, it is by no means intended to convey the idea, that that which has been done, precludes the necessity of further industry or labour; or because much has been executed, perfection has been attained, and that there remains nothing more to do. Luckily for the world and the happiness of mankind, such a state of things is incompatible with our nature, and the success of one species of industry only makes a new exertion more necessary. It has been, on the contrary, the object of a portion of these pages, not only to describe, in justice to the past conduct of these individuals, what they have already effected, but by exhibiting to the publick the merit of their conduct, to stimulate them to further exertion and improvement. — Much as has been already done, much more remains for them still to accomplish; and nothing but a continuance of the same industry, through which they have performed so much, will enable them to extend that which has been so well begun, and which they can now without difficulty effect, since the landlord, by having done that which he has executed, has removed all, or nearly all, those obstacles,

which local and other circumstances, in both ends of the island, opposed to the enterprise of his tenants.

In this manner, for example, the further extension of the most important of all improvements, "draining," is absolutely necessary, and must be rapidly adopted in both countries, if the system of improvement now in progress is meant to be continued;—more activity and exertion in getting in their harvest, and the more correct and active cultivation of their wet lands in England, and ploughing with a deeper furrow *;—a greater attention to the weeding of their crops in Scotland;—an increase to the quantity of permanent pas-

* The propriety of this practice may be proved to the satisfaction of any person who will take the trouble of turning up the subsoil on any of these estates, and examining it, after it has been exposed to the influence of one winter frost; it becomes the best and most friable loam. Though presenting, when recently dug up, the appearance, and possessing the qualities, of the most obdurate and retentive clay. This fact is recommended most earnestly to the tenants at Trentham, and upon the Lilleshall estate. Indeed the necessity of their ploughing deeper cannot be too strongly, or too often pressed upon their attention, as the most necessary, simple, and effectual improvement which can be adopted on their stiff soils.

ture, and attention to their management in both countries; — a further addition to their water-meadows in England, and their introduction into the north; — the complete adoption of the improved mode of ploughing, according to the Norfolk system, (erroneously called, in many places, the Scotch system,) into Staffordshire and Shropshire;— and a more improved mode of making hay in Sutherland, with many other particulars, still remain to be accomplished, and hold out a wide field for the future generous rivalry and exertion between the tenants of the English and Scotch estates.

In conclusion, it is again well to remind the reader, that this statement has not been officiously intruded on the attention of the publick; but such an exposition having been called for, the measures described have been discussed without reserve, and the approbation which they merit has been distinctly claimed, and is confidently anticipated. It is conceived that none have done more, (perhaps a stronger term might be used,) for the improvement of their estates, — for the comfort and happiness of their tenants, — for the amelioration of the districts

with which they are connected, than the landlords of these properties have done. But as their views were just, and their course straight forward, — as their object was the comfort and happiness of all their tenants, and not of any one class only, their measures have called down the disapprobation of all the interested and selfish, who were no longer able to benefit from the system which had prevailed, and who could only claim the attention or commiseration of the publick by the invention and circulation of the most malignant and false statements, — endeavouring thereby to misrepresent the most important feature of their arrangements. The more wide and the more extended, however, the circulation of these misrepresentations have been, the more fully will the real character of these measures be eventually known and estimated; and an effect, the very reverse from that which was intended, will thus have been produced by the propagators of these unfounded slanders.

APPENDIX, No. I.

RENTAL OF KINTRADWELL FOR 1811,

Payable to the Sub-tenant for that Part of the Lands re-let by him.

		Customs.		Victual.			Money.		
		Hens.	Eggs. Doz.	B.	F.	P.	£.	s.	d.
Kelp Shores.	Mr. A. Simpson - - -	-	-	-	-	-	6	10	0
Mill.	Widow Lesslie - - -	6	-	-	-	-	5	15	0
	Two days' work in harvest in corn-yard.								
Clachan.	Alexander Mackay - -	-	-	-	-	-	6	10	0
	Two days' work in harvest in corn-yard.								
Leadoch.	Angus Sutherland - -	6	6	6	-	-	4	0	0
	One cover kiln-drying, clearing hay-lands, shearing 48 stooks, thrashing 12 stooks, 30 horses for a day leading ware, four days work in harvest in corn-yard, one spade and three spreaders of peats, two days repairing peat road.								
	Isobel Mackay - - -	6	6	6	-	-	4	0	0
	Services same as A. Sutherland.								
	William Macdonald - -	3	3	-	-	-	4	0	0
	Shearing 24 stooks, thrashing 12 stooks, two days' work in corn-yard, 10 horses leading ware, one spade and one spreader of peats, one day repairing peat road, thatching houses, clearing hay-lands, one half cover kiln-drying.								
	William Ferguson - -	1	-	-	-	-	1	10	0
	Shearing 24 stooks, one day in corn-yard, clearing hay-lands.								
	Alexander Sutherland - -	-	-	-	-	-	0	5	0
	Shearing 24 stooks, clearing hay-lands.								
	Carried over	22	15	12	-	-	32	10	0

		Customs.		Victual.			Money.		
		Hens.	Eggs. Doz.	B.	F.	P.	£.	s.	d.
	Brought over	22	15	12	-	-	32	10	0
Lecadoh.	Jannet Sutherland - - Shearing 24 stooks, clearing hay-lands.	1	-	-	-	-	0	4	0
Bualreavach.	Alexander Sutherland - - Shearing 36 stooks.	-	-	-	-	-	6	0	0
Cregchait.	Widow Ross - - - Shearing 24 stooks, clearing hay-lands.	1	-	-	-	-	0	8	0
	William Sutherland - - Shearing 24 stooks, clearing hay-lands.	1	-	-	-	-	0	12	0
	Hector Sutherland - - Shearing 24 stooks, clearing hay-lands.	1	-	-	-	-	1	10	0
Badichaple.	Nicolas Macculoch - -	-	-	-	-	-	1	0	0
B. Hachlash.	Hugh Ross - - - Shearing 24 stooks.	-	-	-	-	-	3	0	0
Mullach.	John Mackay - - - Shearing 24 stooks, clearing hay-lands.	1	-	-	-	-	1	10	0
Cottertown.	Alexander Bannerman - - Shearing 24 stooks, clearing hay-lands.	1	-	-	-	-	1	5	0
	Widow Robert Mackay - Shearing 24 stooks.	1	1	-	-	-	2	2	8
	John Bruce - - - Shearing 24 stooks, thrashing 12 stooks, two days' work in corn-yard, one spade, & one spreader of peats, one day at peat road, thatching houses, clearing hay-lands, 12 horses for one day leading ware, half a cover kiln-drying.	3	3	-	-	-	5	1	3
	Robert Macleod - - - Services same as John Bruce.	3	3	-	-	-	4	0	0
	Donald Munro - - - Same as John Bruce.	3	3	-	-	-	4	0	0
	Adam Macdonald - - Same as John Bruce.	3	3	-	-	-	4	10	0
	Eliza Grant - - - - Shearing 24 stooks.	1	-	-	-	-	0	9	0
Clachfluch.	John Mathison - - - Services same as John Bruce.	3	3	-	3	2	3	11	8
	John Sutherland - - - Shearing 24 stooks, thrashing 12 stooks, two days in corn-	1	-	-	-	3	1	7	0
	Carry over	46	31	13	-	1	73	0	7

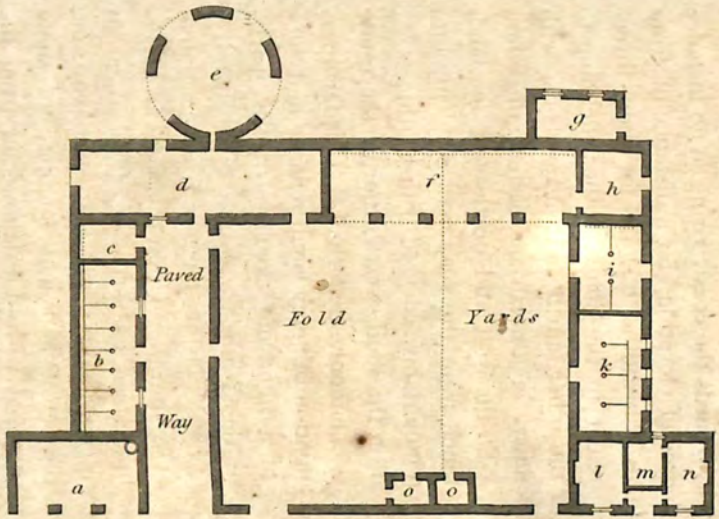
		Customs.		Victual.			Money.		
		Hens	Eggs Doz.	B.	F.	P.	£.	s.	d.
	Brought forward	46	31	13	-	1	73	0	7
	yard, clearing hay-lands, one peat spreader, half a cover kiln-drying.								
Clachfluch.	Donald Sutherland - -	1	-	-	-	3	1	11	0
	Services same as J. Sutherland.								
Balnarich.	John Fraser	6	6	-	-	-	12	0	0
	Services same as Angus Sutherland, Leadoch.								
	Martin Sutherland - -	6	6	-	-	-	12	0	0
	Services same as John Fraser.								
	William Macleod - - -	6	6	-	-	-	12	0	0
	Services same as John Fraser.								
	John Bannerman - - -	6	6	-	-	-	10	10	0
	Services same as John Fraser.								
	Janet Mackenzie - - -	1	-	-	-	-	0	5	0
	Shearing 24 stooks, clearing hay-lands.								
Toighow.	John Bannerman - -	1	-	-	-	-	0	15	0
	Shearing 24 stooks, clearing hay-lands.								
Wilkhouse.	William Gilchrist - - -	-	-	-	-	-	9	9	0
	Shearing 24 stooks, two days repairing peat road.								
	Robert Gordon - - -	1	-	-	-	-	0	10	0
	Shearing 24 stooks.								
Shore.	Colin Sutherland - - -	1	-	1	-	-	1	0	0
	Shearing 24 stooks, two days' work in corn-yard, clearing hay-lands.								
	Jane Mackay - - -	1	-	1	-	-	0	7	6
	Services same as Colin Sutherland.								
	Donald Gunn - - -	1	-	1	-	-	0	7	6
	Services same as Colin Sutherland.								
	Eliza Cuthbert - - -	1	-	1	-	-	0	7	6
	Services same as Colin Sutherland.								
	James Grant - - -	-	-	-	-	-	9	9	0
	Shearing 24 stooks, two days repairing peat road, and two days' work in harvest.								
Tunachu.	William Gilchrist - - -	-	-	-	-	-	2	2	6
Cownanlarichur	Rose Mitchell - - -	-	-	-	-	-	0	5	0
	Shearing 24 Stooks.								
		78	55	17	-	1	145	19	7

ABSTRACT of the Money Rent, and Conversion of the Servitude, &c.

	£.	s.	d.	£.	s.	d.
Money Rent, as above - - -		-		145	19	7
Victual, 17¼ Bolls, at 25*s.* per Boll. - -		-		21	11	3
Hens, 78, at 1*s.* each - - -		-		3	18	0
Eggs, 55 dozen, at 6*d.* per dozen - -		-		1	7	6
SERVITUDE.						
Harvest-work, 138 days, at 2*s.* per day -	13	16	0			
Thrashing 144 stooks, at 2*d.* per stook -	1	4	0			
Casting and spreading peats, 38 days, at 1*s.* -	1	18	0			
Repairing peat road, 20 days, at 1*s.* 3*d.* per day	1	5	0			
Leading ware, 250 horses, at 1*s.* 6*d.* a head	18	15	0			
Clearing hay-lands, 28 under-tenants, say one day each of a man and horse - -	2	16	0			
Covers kiln-drying, nine, at 4*s.* each - -	1	16	0			
Thatching houses, say - - -	1	0	0			
Besides the above under-tenants, 40 in number, there were 28 whose rent, services, &c. may be estimated at 10*s.* each, at least;—28 at 10*s.*	14	- 0	0			
				56	10	0
Total rent of the sub-tenants				£ 229	6	4

This farm had been granted in wadset, or mortgage, for the sum of 800*l.* In 1811 the wadsetter granted the residue of the term then unexpired, being eight years, to the late sub-tenant, Mr. Macpherson, for a fine or grassum of 800*l.* and the annual rent of 150*l.* The value of the land in Macpherson's own occupation, amounted to 200*l. per annum*, thus making the whole income derived by him from the farm 429*l. per annum*. In this case there were three gradations between the landlord and the occupier of the land, in some instances four.

PLAN AND ELEVATION
of a
HOUSE AND FARM BUILDINGS
at Cyderhall
Erected 1818.



APPENDIX, No. II.

An Account pointing out the Progress of the Agricultural Improvements on the Estate of Sutherland.

THE most southerly district of the estate of Sutherland, commencing at the Dornoch Frith, extends, in a continued line, for about seven miles, with the short exception of the estate of Embo, to the Little Ferry, or Loch Fleet. The greater portion of this district, is uniformly low towards the coast, rising in no instance to any great degree of elevation, for a distance of from two to three miles in breadth. It slopes for about three-fourths of its extent to the south, rather inclining to the west. For the other fourth part it descends, with considerable rapidity, in a north and easterly direction, to Loch Fleet. To the west and north-west the land, at the above distance from the sea, rises suddenly into steep and barren mountains, covered with heath.

The first farm on the south-west corner of the estate is that of Sidera, commonly Cyderhall. This farm was lately in the occupation of many small tenants and sub-tenants. It is of a light and excellent quality, particularly suited to the Norfolk rotation of husbandry, which is followed by Mr. Rule, the new tenant, a native of the county of Roxburgh. Upon this farm an excellent house and homestead has been just finished, at an expense of TWO THOUSAND TWO HUNDRED POUNDS. It is built in the most sufficient manner, of stone and lime, and covered with Easdale slate, from the

west coast of Scotland. In the garden, which is an old one, there are several apple, pear, and geen (a small black cherry) trees, of so considerable a size, with some of the finest holly trees, to be met with any where, as to show that there is nothing in the climate to prevent the growth of even the more delicate kinds of timber, if not exposed to the sea-breeze. The present tenant entered to the land at Whitsunday, 1817. At that period it was entirely unenclosed. The cottages of the occupiers were dispersed all over it. The small portion that was arable was intersected with heaps of stones collected off the land, or with portions of grass which, being pastured, exposed the crop to the continual depredations of the cattle. It was further divided by balks, such as are seen in the common field lands of England, though to a greater extent. These have been all removed. The cotters, whose services were not required, have been settled upon the Dornoch muirs. The collections of stones have been used either in the construction of dykes for fences, or have been employed in the construction of roads. The intermediate portions of grass and balks have been ploughed up, and the farm has already begun to assume a regular shape and cultivation. The enclosures are proceeding with activity, and will soon be finished. The tenant has already had a large portion of it in turnips. As there was no farm more completely occupied, up to a late date, according to the old system, than this one was; and as there was none better fitted for the adoption of the modern system of husbandry, in all its branches, it affords a complete example of them both, and a striking contrast of the defects of the one and of the advantages of the other.

To the north and east of this farm is situated that of

Evelicks, in the occupation of Mr. Taylor, Sheriff Clerk, who has lately done much in enclosing it, and bringing into cultivation a considerable portion of heath. It is bounded upon the west by a very flourishing plantation of Scotch firs, made about seven years ago, and another which has just been completed along the Skibo and Ospisdale marches, extending, in the whole, to better than FOUR HUNDRED acres. This latter plantation was undertaken in conjunction with Mr. Gilchrist, who has formed a large one upon his side of the march. The soil appears particularly suited to the growth of this tree, as it was found springing up naturally all over this district. This farm is also bounded upon the south and east by a long chain of gravelly hills, called the Evelick's hills, which have just been enclosed and planted to the extent of about TWO HUNDRED AND TWO acres. Between this plantation and the Dornoch Frith, there are several small farms, and other allotments, coming gradually into cultivation. In the vicinity of the town of Dornoch, which is situated at the east end of these hills, there is a considerable proportion of old infield land, a small portion of which does not belong to the estate of Sutherland; that which does, is in an excellent state of cultivation, being either occupied in small farms, or let as accommodation land to the people of the town. To the northward of Dornoch are situated the farms of Pitgrudie, Achley, Proncynain, and Proncy, occupied by Messrs. Angus Fraser, and Hugh Lesslie, and Mrs. Mackay, who have all added very considerably to the extent of their land in cultivation, and otherwise improved their farms, by inclosing and draining.

Upon each of these farms, and also on several of those mentioned before, respectable farm offices, covered

with tiles or slates, have been erected, and the best rotation of alternate husbandry, with drilled turnips, has been adopted.

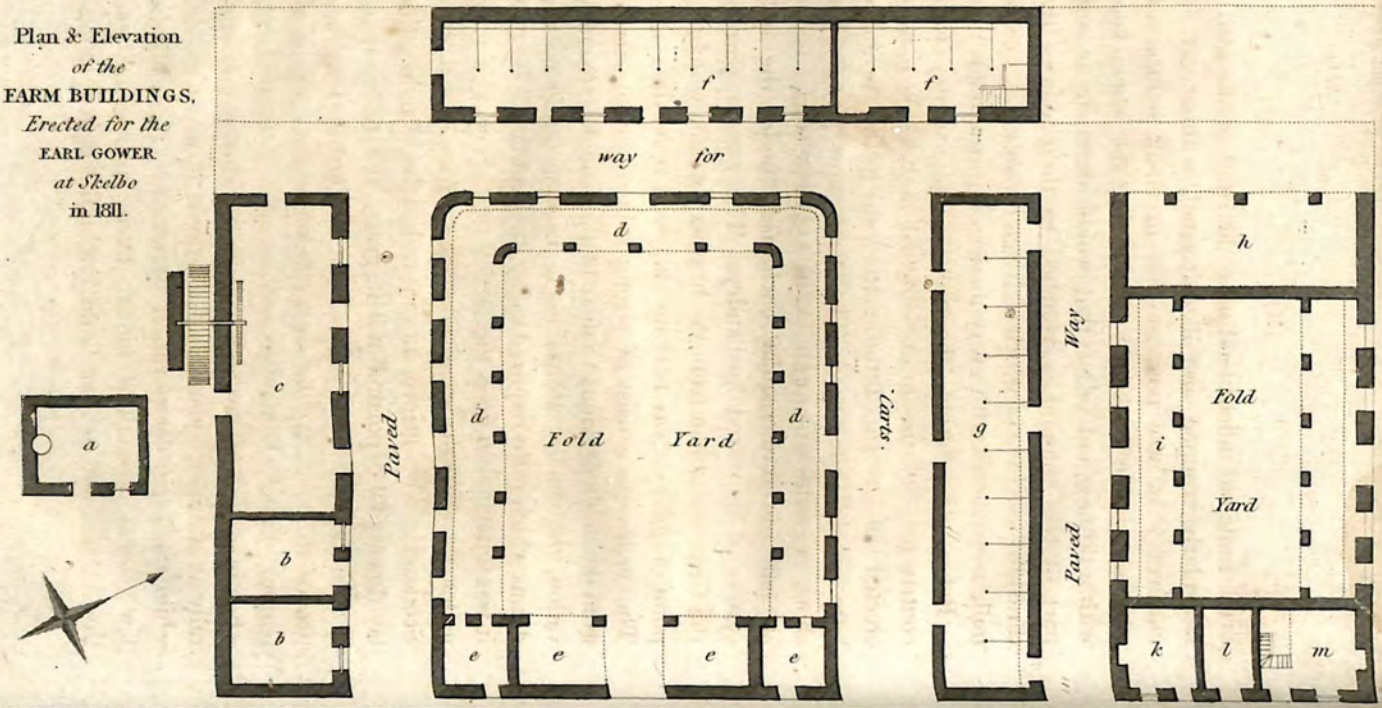
Beyond these farms, to the top of the slope, and for a considerable way down the descent of the hill, towards Loch Fleet, are situated the muirs of Achavandra and Fourpenny, forming the eastern extremity of the muirs of Dornoch. A considerable number of settlers have chosen this part, on which to fix their residence; and, without any encouragement, they are, according to their respective means, extending their cultivation around them. A portion of the females of this district have, for some years, received regular employment from the agent of some London house in plaiting straw. This, however, is unfortunately on the decline, the women in general preferring the more active, though certainly the less cleanly, occupation of gutting herrings.

Beyond these muirs, situated upon the south-east shore of Loch-Fleet, is the farm of Coul, occcupied by Mr. Robert Sutherland, who has both improved his old infield land, and increased considerably the extent of land in cultivation. Upon this farm also has been erected a set of farm-houses.

Further up the Frith is situated Skelbo, a farm occupied by Lord Gower, and managed, under his Lordship's directions, by his grieve, Thomas Barclay, a very intelligent, active, and industrious man, a native of Forfarshire. The old castle at this farm was, at one time, the residence of the bishops of Caithness, and afterwards belonged to the Duffus family, a junior branch of that of Sutherland.

Previous to 1811, it consisted of a ruinous set of of-

Plan & Elevation
of the
FARM BUILDINGS,
Erected for the
EARL GOWER
at Skelbo
in 1811.



fices, some old infield land near the ruins of the castle, irregularly cropped and ill cultivated, without any inclosures. It now possesses an excellent homestead, with a suitable house for the grieve; the whole kept with a tidiness and order that would do credit to any part of the kingdom. Attached to these offices, the thrashing machine of which is driven by water, is a corn-mill, constructed with every modern improvement.

Before its erection, the mills of the country were contrivances of the most wretched and feeble nature, erected in hovels little better than the ordinary huts of the country. The farm now consists of about THREE HUNDRED AND SIXTY Scotch acres, all laid out into regular enclosures, under the best system of improved husbandry. The greater part of the farm was taken from the heathery waste, which, in point of quality, was perhaps the worst upon the estate. The inclosures consist of strong stone dykes, quarried from the fields previous to their being brought into cultivation, the smaller stones being used in filling up the drains which were required to lay the land dry. At first it was intended to keep the larger portion of this farm under the plough; a mistake very prevalent all over Scotland. The grieve, however, has been induced to lay down a large portion of it in grass, and to top-dress it with sea-ware, or with lime compost. This has proved to be by far the most profitable mode of occupation. The whole of the coast-side of Sutherland, when once turned up and well limed, throws up naturally an unusual quantity of a very rich white clover, while the rapid deterioration of the corn crops, after a few years of continued plough husbandry, points out the former, and not the latter, to be the system of ma-

nagement which ought to be pursued. Besides which, in so remote a district, removed from every great town and market for grain, in a climate, moreover, inclined to wet, it is prudent to have as little under the plough as possible. The difficulty of finding a market for grain is considerable; whereas there is none in disposing of the cattle, as they can be easily driven to the southern markets, even if no drovers should come to purchase them on the spot. The stock raised on the farm consists of the Aberdeenshire breed, with the improved West Highland breed obtained from Dunrobin mains, where they have been long reared with great success. Lord Gower also brought a stallion and three mares from Suffolk, which has tended greatly to improve the breed of horses in Sutherland.

The wheat and turnips produced on this farm are of the best quality, and every improved agricultural implement is in use. Under the superintendence of Lord Gower's grieve, the cultivation of the adjoining muir of Balvraid, descending to Loch Fleet, is going on; and it will be curious for travellers to remark the progress which is made in bringing that bleak and heathy slope under the dominion of the plough. As a boundary to the upper part of this farm, a plantation, consisting of nearly THREE HUNDRED acres, was made in 1813. It consists chiefly of Scotch fir and larch. In the hollows, and where the soil is loosest, the latter have decidedly taken the lead. Experience, however, appears to support the conclusion, that they will cease to do so by the time they are about fifteen years old, and this decay will occur sooner, if they begin to feel, before then, the effect of the sea-breeze. It is a remark, which the example of Scotland, as well as that of the Alps, bears

out, that this tree is not in general a native of, nor does it arrive at maturity in a soil which is composed of any of the class of granitic rocks. From not attending to this circumstance must be attributed the great decay which has lately affected the large plantations of larch in many parts of Aberdeen and Banff shires. It is understood at the same time, that the remains of one of the largest larches existing is to be met with on Mont Blanc near the extreme limit of vegetation.

Between the farm of Skelbo and the road leading to the mound, a considerable addition has been made to the arable land in that vicinity by the exertions of Dr. William Ross, who has enclosed the fields, which he dug out of the muir with strong dykes. He has also built a small set of farm offices covered with tiles. A similar exertion to a smaller extent, though upon a larger scale as compared with their means, has been made by two settlers upon the road side. Dr. Ross's farm of Balvraid is to be added to the Skelbo management,—he is to get in return for it a small farm further on, called Cambus-avie, forming a pretty amphitheatre of arable land, under a wretched system of cultivation, and situated between the road and Loch Fleet. This will lay his land altogether, his residence being at Cambus-more, above the south end of the Mound.

This magnificent work, and its uses as a medium of communication between the two extreme points of the county, has been already described and fully explained. It has been also stated, that in consequence of its construction, there has been obtained about FOUR HUNDRED acres, which was formerly overflowed at high-water. Besides enabling the upper tenants to reclaim some arable land which was occasionally injured by the tide. The soil however of this acquisition is composed almost

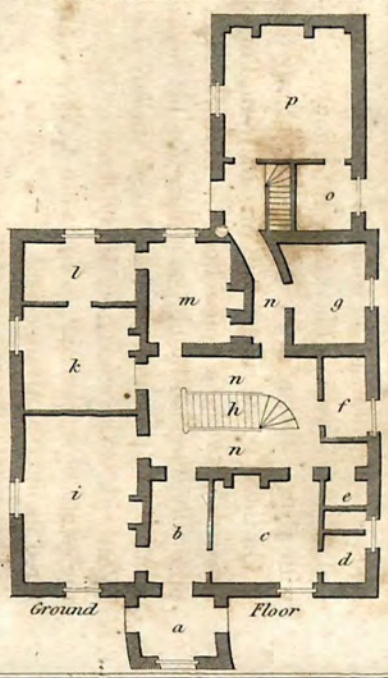
entirely of sea-sand, excepting those places where the fresh water streams trickle over it. In those places a small deposit of alluvial matter has encouraged the growth of the fiorin grass, which will probably in the course of time, cover a large proportion of this flat. The floods in the river, during the spring months, are both more considerable and more frequent than was attended to or calculated upon. The consequence is, that the waters of the river when the tide is full, both covers a larger portion of this space, and it remains longer under water than was expected. This is in some degree owing to the number of arches being lessened from what Mr. Telford originally intended, and was only agreed to by that gentleman in consequence of the local information which was laid before him and pressed upon his attention. The effect likely to be produced by these floods remaining stagnant upon this space, will be to deposit on the sand more quickly a considerable quantity of the alluvial matter, which the Fleet and the other streams carry down from the mountains and from the strath. The progress of vegetation will thus be very much quickened; but it makes it very doubtful whether it will be possible at any future period to bank off a portion of it for the purposes of pasture, or of agriculture, and at the same time to leave a sufficient space to contain the flood water of the river. A regular register however is kept of every flood that takes place in the river, of the height to which it rises, of the space which it overflows, and of the time which it takes to run off, so that by the period at which this land will be in a state fit to be applied to any useful purpose, a correct notion will be obtained of how far, and to what extent it will be practicable to appropriate any part of it to the purposes of husbandry.

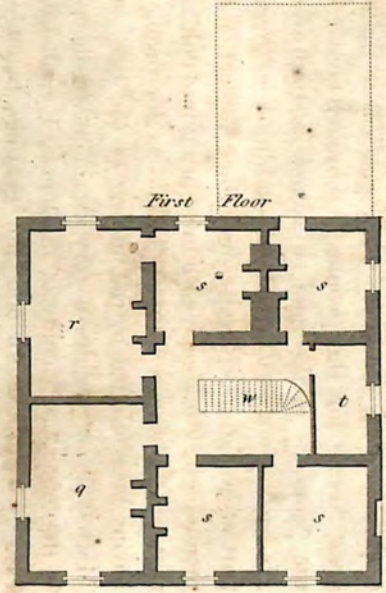
PLAN AND ELEVATION

OF MORVICH COTTAGE,

in Strathfleet

Erected 1812.





Scale of Feet.

5 10 20 30 40 50

Geo. Alexander Colepie, del.

Pub. by Longman & Co. July 1820.

Looking up Strath Fleet, from the mound there is perceived, upon the left-hand, Torboll, the residence of Capt. Kenneth Mackay. This gentleman unites, to great feeling for the people, a thorough conviction of the propriety of the modern system of improvement. He has made a very considerable addition to the arable part of his farm, especially since the construction of the mound, which has enabled him to bring into cultivation, that which he was formerly unable to do, owing to its having been affected by the flowing of the tide. Capt. Mackay holds besides a very considerable sheep-walk in the immediate vicinity of his house, bounded on the east by Cambusmore and the grazings belonging to the muirs of Dornoch; on the south by the estates of Skibo and Ospisdale; on the west by the sheep farm of Rhine, in the occupation of D. Gilchrist, Esq., of Ospisdale, which marches with the sheep-farms of Invershin and Achenduich, and the lotters' settlements near Lairg. The wintering portion of this last farm, is the middle part of Strath Fleet. Capt. Mackay has also a stock farm called Mudale, which is situated at the upper end of Loch Naver. There is a good house at Torboll with a very substantial set of farm offices lately erected.

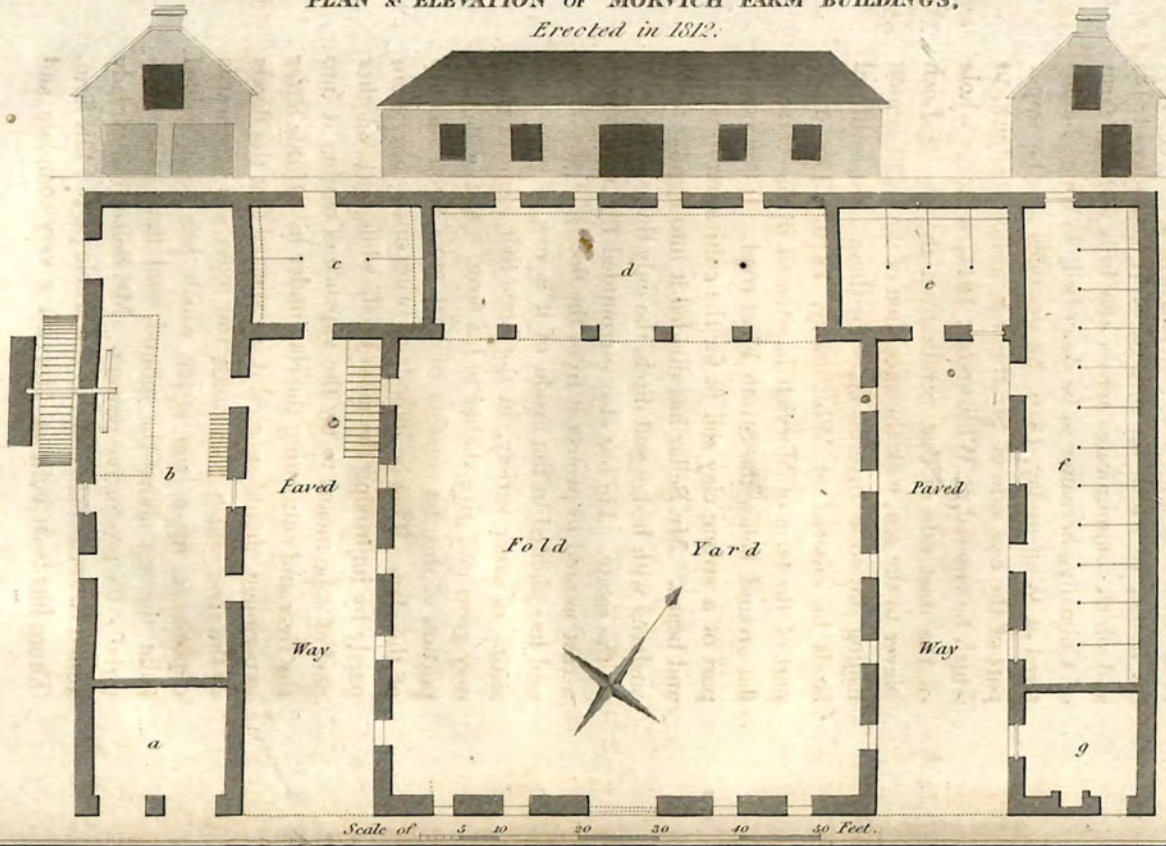
On the opposite side of the Strath, from Torboll, is situated Morvich, a house built by Lord Stafford, and originally intended by him as a place for his occasional residence. It is now let to Patrick Sellar, Esq., of Westfield, in the county of Moray, formerly factor upon the estate of Sutherland, who has in a slight degree altered its internal arrangement.

This gentleman is one of the most extensive stock farmers in Britain, and one of the most active of its improvers, in every branch of rural economy. Besides a

considerable tract of land in the immediate vicinity of his house, to which he entered at Whitsunday, 1818, and which communicates across the hills with the farm of Culmaily, hereafter to be described, to which he entered at Whitsunday, 1810, he occupies all the upper part of the east side of Strathnaver, called Rhiloisk, to which he entered at Whitsunday, 1814, with the whole of the west side of that Strath from the top of Loch Naver to the sea, with the exception of the small salmon fishing station at Invernaver. To these last-mentioned lands he entered at Whitsunday, 1819. The arable part of the farm of Morvich is situated in the carse or flat ground below the Strath Fleet road. It consists in part of a strong clay soil fit for the cultivation of wheat and beans. Mr. Sellar has divided it into regular fields enclosed with hedge and ditch, the only thing of the sort on the estate. He has also surrounded the whole with a vast mound to protect it from the floods of the river, and has planted in the inside of it a row of trees consisting of every variety, in the hope that some of them may grow and give shelter to his farm. A considerable portion of this flat consists of peat moss upon the top of the clay. This he intends to bring into cultivation, partly by improving the moss itself, while with another part of it he means to try the expence of casting it into the river and cultivating the clay under it. If this latter experiment should succeed it is expected that the floods in the river which float down the moss will afterwards deposit it upon the space which has been gained from the sea above the mound, and thus hasten materially its productive powers. Mr. Sellar has already added FORTY Scotch acres to the arable part of this farm. There has been built at Morvich a very complete and

PLAN & ELEVATION OF MORVICH FARM BUILDINGS,

Erected in 1812.



Geo. Alexander, Golspie, del. Pub. by Longman & Co. July, 1820. Sidr. Hall, sculp.

most substantial homestead of farm offices, with a thrashing mill which is driven by water.

The second district on the coast-side consists of that tract of land which lies between Loch Fleet and a point towards Brora, called Strath-steven, where the hills, descending to the shore in an easterly direction, divide it from the Doll of Brora, and protect it from the northerly and easterly gales. Its extent in this direction is between seven and eight miles. In no instance does it extend in breadth much above one mile. The first part of this district consists of a low-lying plain, which is of a poor gravelly nature next the sea, from which it is protected by a range of sand-hills covered partly with grass and partly with bents. These hills are occupied as a rabbit-warren. The remaining portion of this gravelly plain has been planted, to the extent of between two and three hundred acres, with Scotch firs, which are growing with great vigour. Beyond this the ground gradually ascends and improves regularly in its quality. Lying a little hollow in the middle, however, it has been necessary, in order to protect it from the effect of land floods, to construct a ditch from Loch Fleet towards Golspie, a distance of FOUR THOUSAND ONE HUNDRED AND EIGHTY-FIVE yards. This ditch is twenty feet wide at the top and eight feet deep.* The first farm in order is that of Craigton and Kirkton, one of the best on the coast-side. It consists of about

* The sides of this drain are laid with turf, which preserves them from falling in. Three hundred and sixty-nine yards of this drain were cut through the loose sandy links of Golspie, sixteen feet deep; and is made a well paved and covered culvert, two feet six inches high, by two fee two inches wide.

two hundred and fifty acres of the best turnip and barley soil. The latter division of it was for some years in the occupation of Lord Stafford, during which time it was thoroughly cleaned, and the greater part of it laid down in grass in excellent condition by his Lordship. The former division of it was managed under the ancient system and has suffered accordingly. Previous to the expiration of the old tack, the crops were hardly to be seen amidst the luxuriance of weeds, and it presents almost one of the best specimens of the effects of the old system of management now extant. It has been let to Mr. Alexander Craig, from Morayshire, from Whitsunday, 1819, who it is expected will farm it according to the best rules of husbandry. Although it may be remarked that the very respectable farmers of that county, who are as improving and intelligent a body as any in the kingdom, do not as yet clean their lands, more especially their green crops, with the same care and attention as is done in the improved districts of England, and some of the more southern parts of Scotland. A good house and a modern homestead of offices, the former covered with blue the latter with grey slates, were erected a few years ago at Kirkton by a former tenant; but on his quitting the farm, they were paid for by the landlord. This farm is at present uninclosed, but it is to be subdivided by dykes at the expense of the landlord and the tenant.

On this farm and not far from the house, below the road, is situated an ancient burial-place of the parish of Golspie, formerly Culmaily. Here are interred the remains of many of the ancient Earls of Sutherland; but, except a stone, erected by Lord and Lady Stafford, with a short Latin inscription, there is no other monu-

ment to point out that this was the burial-place of the chiefs of so ancient and powerful a clan. To erect splendid monuments over the dead does not seem to have been prevalent among the Celtick tribes. Several of the Earls of Sutherland were also interred in the cathedral at Dornoch.

The next farm is Culmaily, to which Mr. Sellar entered at Whitsunday, 1810, as already mentioned. At that period it was entirely occupied according to the fashion of the country and of the times. It was covered with black huts and cultivated in detached patches. The pasture, which lay intermixed with the arable land, was destroyed by being pared from time to time in order to build or cover their huts.

This farm now displays one uniform scene of the most beautiful husbandry, extending from the mountains to the newly formed plantations near the coast. It shows what may be done in a few years by skill and industry properly directed. It is regularly divided into fields of a rectangular shape. These have been enclosed with the most substantial walls, the materials for which have been obtained from the sides of the mountains, thereby enabling Mr. Sellar to render a considerable portion of these barren wastes arable, though at an expence of labour and of money which would astonish and probably deter any farmer from the south from undertaking such an improvement. Thus has Mr. Sellar actually torn out of the mountain, and otherwise brought into cultivation above one hundred acres, now bearing the best crops of every species of grain, with excellent turnips; while by his superior cultivation of the lower parts of the land he has more than quadrupled the produce of that part of the farm. At first, Mr. Sellar

followed nearly the Norfolk rotation of husbandry. Stimulated by the high prices of grain, he, in common with others equally intelligent as himself, was led into the error of endeavouring to raise more corn from his farm than it was calculated to bear, conceiving that he might, from the superior profits that he derived from this system of culture, be enabled to keep it in heart by an additional quantity of manure. He soon began, however, to perceive his error, and the moment he did so, he wisely abandoned the rotation which he saw was likely in the long run to exhaust his land. He has accordingly laid down a larger proportion of his farm into permanent pasture, and that proportion of it which he continues under the plough he brings round into a crop in a slower rotation. He has by doing so much improved the productiveness of his land, and the quantity of white clover, which the soil naturally throws up, tends greatly to encourage and reward this practice. Mr. Sellar has erected an excellent set of offices upon the farm covered with grey slates. His thrashing mill goes by water, to which he has attached a corn mill, which does considerable business in the country. The water is supplied by a lake among the hills, called Loch Lundy, the waters of which have been regulated by a sluice.*

* In the Appendix No. VII. is inserted a letter from Mr. Sellar, containing a very interesting account of the state of the county of Sutherland, in the year 1809, when he first settled in that country; with an account of its subsequent rapid improvement. This letter contains a very full and instructive report upon the course of management pursued by the stock farmers in that district, which is the more valuable as it embraces the practice of one of the most enterprising and successful, as well as extensive adventurers in that department of rural economy.

The next farm, Drumuie, is occupied by Capt. Robert Sutherland, late of His Majesty's service — a most respectable gentleman — a native of this county. If in some particulars this farm should not be cultivated with the same perfection as those which are occupied by persons regularly brought up to the profession, it must be remembered that the habits of a soldier not only readily accounts for this difference, but that to this gentleman is due the praise of having begun the task of improvement before there were the same reasons for exertion, or the same opportunities of giving effect to them, as exist at the present time. He entered upon his farm in 1809, and accordingly led the way to the improvement of the coast-side. Capt. Sutherland has erected a handsome and commodious house upon the declivity of the hill, with a complete set of farm offices below, built of stone and lime, and covered the former with blue, the latter with grey slates.

The next farm is Rhives, the residence of the factor; being always occupied by the gentleman holding that situation. An excellent house has been built for his accommodation, with apartments for his clerks, and offices for carrying on the details of the estate. The farm offices which have been also lately erected by the landlord are of the same durable construction.

Considerable plantations have been formed in the vicinity of the house and on different parts of the farm, which have been calculated to serve the purposes of shelter and of decoration, and at the same time to form a considerable feature from the windows of Dunrobin Castle. The higher and more exposed situations have been planted with Scotch firs. In the more sheltered situations, and on the banks near the road-

side, where the soil is deeper, the wych, or Scotch elm and sycamore have been tried, and as yet the experiment has been attended with every success. In order to fence these plantations and to enclose the fields a considerable number of stones were required. These have been obtained from the higher parts of the farm in the manner described as having been done at Culmaily. This expence is borne by the landlord, an addition being made to the rent at the rate of six and a-half *per cent.* upon the amount of his Lordship's

The same system of improvement has been pursued to a very great extent upon the adjoining farm of Golspie Tower, in the occupation of Mr. James Duncan, a native of the county of Fife, formerly the grieve at Dunrobin Mains, and now the inn-keeper at Golspie. The improvements upon this farm and the excellence of the fences perhaps exceed those of any other farm upon the estate. And it would hardly be credited by any person travelling along the road, and looking at the excellent state of cultivation now exhibited on those two last-mentioned farms, that they were for the greater part, within five years, covered with heath and overloaded with rocks and stones. Upon this farm also an adequate homestead has been built.

At the bottom of these two last mentioned farms and between them and the sea is placed the village of Golspie. In the year 1812, it was composed of a collection of black mud huts, in the usual style of the country. It now consists entirely of a street, of neat, clean, well-built houses, with some excellent shops, constructed in a way that would do credit to any part of the island. A much greater attention to tidiness in every particular is exhibited, and the whole displays a very important and

delightful proof of the improved habits and comforts of the people.

Beyond the village, the burn of Golspie, descending from a deep and romantic glen, falls into the sea. In the wider part of this valley is situated the inn of Golspie, remarkably commodious and well kept. Further up are placed the mills of Golspie, consisting of a corn-mill, a flax-mill, and space for a flour-mill, if the necessities of the country should require such an accommodation. These were erected at an expence of EIGHT HUNDRED AND FIFTY POUNDS.

From this glen to the eastward, the arable land stands upon a considerably higher elevation than the former part of this district, which has been already described, and comprises the home farm, or Mains of Dunrobin, consisting of about FIVE HUNDRED arable acres. This farm is under the management of Mr. Alexander Stuart *, from the county of Roxburgh, one of the best and most industrious farmers of that county, who have taken so decided a lead in every improvement connected with modern husbandry. Under his management this farm has been brought into a state of culture to be equalled by few, and surpassed by none in the kingdom. The crops of corn and turnips which it produces are the admiration of every stranger travelling through the country, who little expects to find so high a state of cultivation in so remote a district; and in one too, which, from its general character at a distance, so little

* Since this paper was written Mr. Stuart has sunk under the over exertions he made in the execution of his duty. He was in every respect a most valuable and meritorious servant.

of the sort is looked for. To him, however, is due this further praise, that he has brought this farm into the state of cultivation now described entirely by means of ploughmen, natives of the country.

When Lord Stafford and his tenants originally began their improvements, a well constructed plough had never been seen in the country. The natives were entirely ignorant how to use them in a workmanlike manner. It was necessary, therefore, both to establish ploughwrights in the country, and to fetch ploughmen from the more southern parts of Scotland. Nothing, however, could be an object of greater importance, than to teach the rising generation of the county how to use the plough in a skilful manner.

Mr. Stuart has done so in a way that does as much credit to his perseverance and good temper, as it does to the docile disposition of the people, who have adopted his instructions with much alacrity. Almost all the ploughmen on the coast are now natives of Sutherland, and as they have become skilful workmen, and have acquired habits of regular industry, and the use of the English language, a considerable number of them leave the country every year to obtain better situations in the more southern counties, a fact illustrating and enforcing in the strongest manner the view taken in a former part of this paper, of the inestimable advantages arising from the use of the English language. On the coast side of Sutherland, the progress which the people have made in this respect, is highly gratifying, and all the younger generation will have entirely adopted the use of the English language. As connected with this subject it may be remarked, that there was not a person in Sutherland who was regularly bred to be a dyke-builder,

or who could execute his work in a sufficient and creditable manner. One of the most necessary and important arts in all parts of Scotland, but especially in the north, where that sort of fence is the only practicable mode of enclosing the land. In this instance also, it was necessary, at first, to obtain assistance from abroad. But the same progress has taken place in the perfection of this art, and the Sutherland dyke-builders have become among the most expert in Scotland, and not only perform the whole of the work required in their own county, but now obtain work in every other. A matter of no slight importance where all the stone cottages erected in the country, are the work of the people themselves.

A considerable part of the mains has been laid down to permanent grass, especially the fields along the shore. This has been attended with the same good effect as at Culmaily and Skelbo. They have been top-dressed with a compost of sea-ware, with the same advantage to the grass as a similar practice renders the pastures of England so rich and luxuriant. * The cattle upon

* It is to be regretted that there should exist all over the North of England and in Scotland, so great a prejudice on the subject of the management of old grass, the construction of water meadows, and the making hay according to the system pursued in the South of England. It is much more easy to introduce an improvement into a country whose practice is very defective, than into one which has lately made considerable progress in its improvement. At Dunrobin the hay is constantly made according to the English fashion, without suffering any injury from heating. A certain degree of fermentation is necessary to make good hay, in order to preserve the juices, and produce the proper quantity of saccharine matter. Nothing is so heart breaking as to see the quantity of excellent hay spoiled every year in the

this farm are of a very superior description, they are of the improved west-highland breed, and great care and attention have been paid to them. There are belonging to the farm about sixty breeding cows, besides ten Ayrshire cows for the dairy. Until within these two years it was difficult to obtain an adequate price for these cattle, without great exertions being made. Since that period respectable dealers, in consequence of the roads being completed, come regularly to the country, and carry off the stock at the best prices of the day.

A large and extensive set of farm offices have been built for the use of this farm, with all the conveniences required for an arable and breeding farm, and the houses and buildings necessary for the accommodation of the grieve and the farm servants. The thrashing machine goes by water which is diverted from the burn of Golspie, supplying at the same time in its course water to the farm, to the poultry-yard, to the castle, the dairy, the garden, and, lastly, scouring out the harbour. To this farm is attached a considerable sheep farm bounded by the farms of Culmaily and Sciberscross, and the river Brora.

In the centre of this farm, and upon a rising ground above the sea, is situated the castle of DUNROBIN, the original seat of the ancient family of Sutherland. It consists of an old square tower of great height, which is the original part of the edifice. The date of its erection is believed to have been as early as the eleventh century. Attached to this tower, are a more modern set of buildings constructed round a court, in style, resembling those turreted

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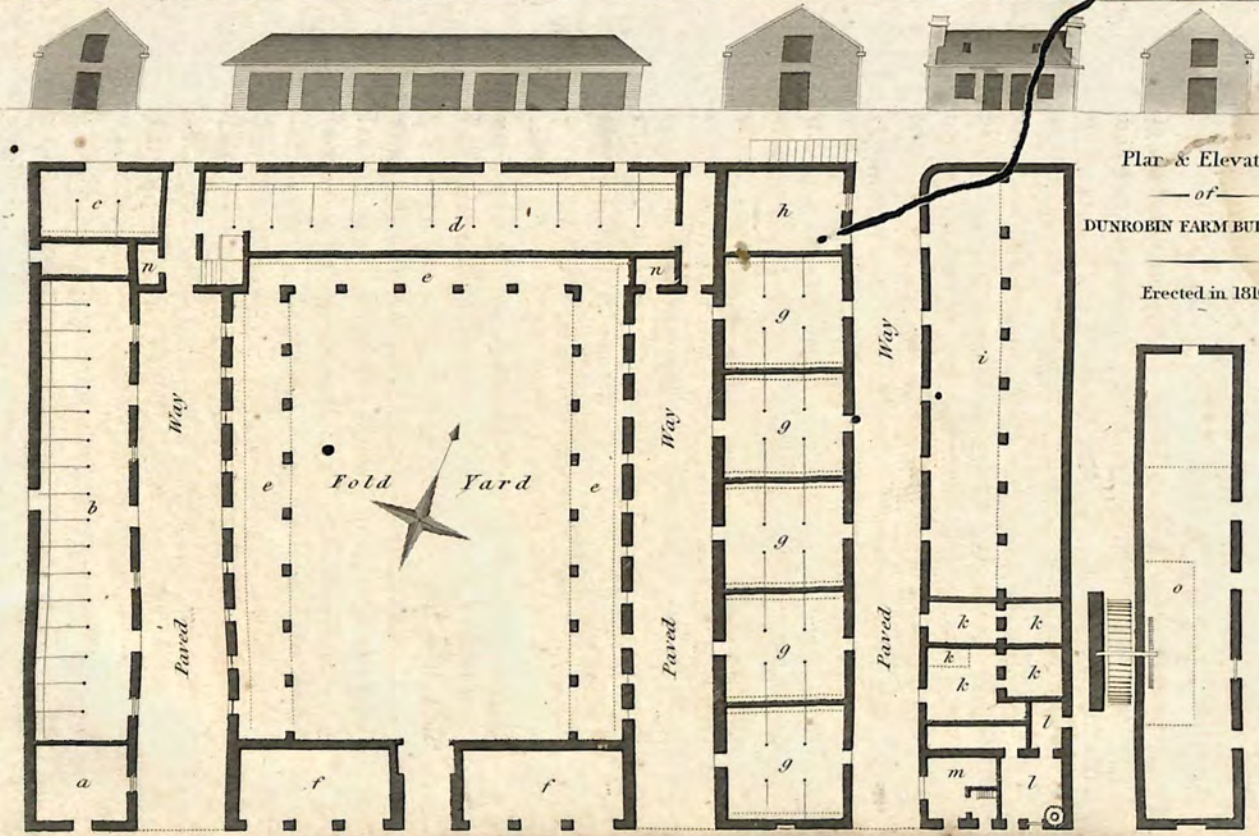
North. Standing in hay-cocks all the fine season, and no exertion made to take it in until the weather begins to break, and the business of the harvest is about to commence.



Geo. Alexander, Golspie del. Scale of 3 10 20 30 40 50 100 Feet. Sidl. Hall sculp.

Pub.d by Longman & Co. July, 1820.

houses which were erected in Scotland at the commencement of the seventeenth century. At the bottom of the bank, upon a flat raised a little above the level of the sea, are placed the gardens, which are of considerable extent, including within the circuit of the walls both the kitchen and flower garden, in which are interspersed some trees of considerable magnitude. To the westward is situated a deep glen, through which a small burn runs, and in which the ash and the beech have grown vigorously without being affected by the sea breeze.

The situation of the castle is thus singularly striking and beautiful; placed at the edge of this wooded glen, upon a knoll of almost perpendicular steepness, and of considerable height, springing at once from the level of the ocean; it overlooks the old gardens and its trees, carrying the eye without interruption to the Moray Frith, which stretches in one uninterrupted sweep from the mouth of Loch Fleet to the Knock of Cullen. The opposite shore is bounded with the bold outline of the mountains of Ross-shire, Badenoch, and Strathspey, of which Ben-Wyvis, Cairn-Gorum, and Ben-Rines are the most conspicuous, while the effect of the whole is vastly increased by the united murmur of the waves of the ocean, and the dashing of the burn from rock to rock through the glen, over which is seen to rise the mountain of Ben-Vraggie, whose base is covered with wood. Combined with the beauty and liveliness of the scene, in a manner well suited to the residence of a Northern Chieftain, there prevails a degree of splendid wildness and a sensation of remoteness, yet so softened, as to add to the general effect of grandeur and magnificence, without producing those less pleasing associations which the separation from more active life is apt to create.

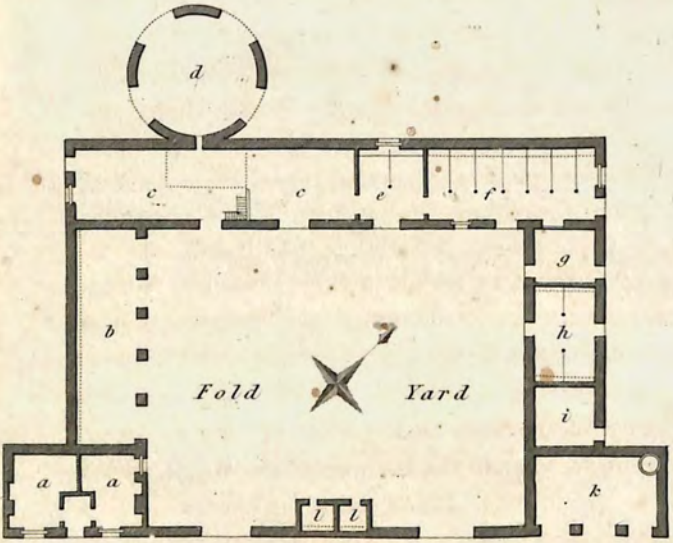
Nothing can, in all respects, form a stronger contrast than it does to the style and the consequence of Trentham, marked by the lowness of its situation, the softness and the smoothness of the lake, surmounted by the striking bank of oak-wood which rises from its edge, aided by all those details, both as to pleasure-ground and house, which accompany and distinguish the residence of a great English nobleman. The two places characterise, in the most striking and remarkable manner, the history of the countries to which they respectively belong. The ages of repose, and the stamp of the most perfect civilization which the world ever witnessed, are as distinctly to be traced in the features, landscape, and the other accompaniments of Trentham, as the insecure and unsettled state of the country, until a period of a late date; and the comparative little regard paid to the elegancies of life, are strongly marked in the wild yet splendid range of Dunrobin scenery.

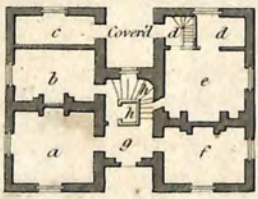
The mountains in the vicinity of the castle, and the banks along the sea, have been planted with Scotch firs, and other trees, and are of various ages. Of late years these have been much extended in different directions, but principally with a view of connecting the home-walks with those of the Den of Golspie, one of those striking scenes in that peculiar character which distinguishes and gives the charm to the Glens in Scotland. There have been planted on this estate, within these few years, about SEVEN MILLIONS of trees.

Below the castle was erected, in 1812, a convenient pier, at an expence exceeding SEVEN HUNDRED pounds, in order to promote the intercourse along the coast, and with the opposite side of the Moray Frith.

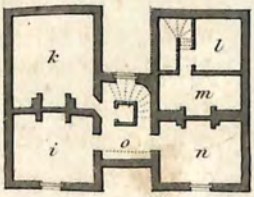
PLAN AND ELEVATION OF A FARM HOUSE AND BUILDINGS,

Erected at *INVERBRORA* 1820.





Ground Plan.



Garret Floor.

Scale of Feet.

5 10 15 20 25 50 75 100

Geo. Alexander, Golspie, del. Pub. by Longman & Co. July, 1820. Sidr. Hall, sculp.

The third arable district comprises the farms situated between Strathsteven and Loth-beg, including the mouth of Strath-Brora, a distance of nearly five miles. The first farm, Uppat, a late acquisition, is in the occupation of the landlord. This farm has been greatly improved by enclosing the whole of it with dykes six and a half feet high, in order to make them sufficient to confine the sheep. The arable land has also been greatly improved and extended; besides which, near three hundred acres have been planted with Scotch firs,—the whole forms a remarkably pretty farm, arising out of the variety of ground, and the distribution of the plantations.

From this point to the farm of Clyne-milton is situated the mouth of Strath-Brora, one of the great scenes of population, where the people have been settled. This situation was selected on account of the quality and nature of the soil, watered by the river Brora, and from its vicinity to the harbour of that place, which had been constructed at an expence exceeding TWO THOUSAND SIX HUNDRED POUNDS. It was farther selected for this purpose in consequence of the works which had been established in the neighbourhood, and from its being in the centre of the most extensive agricultural improvements, both in progress and in contemplation.

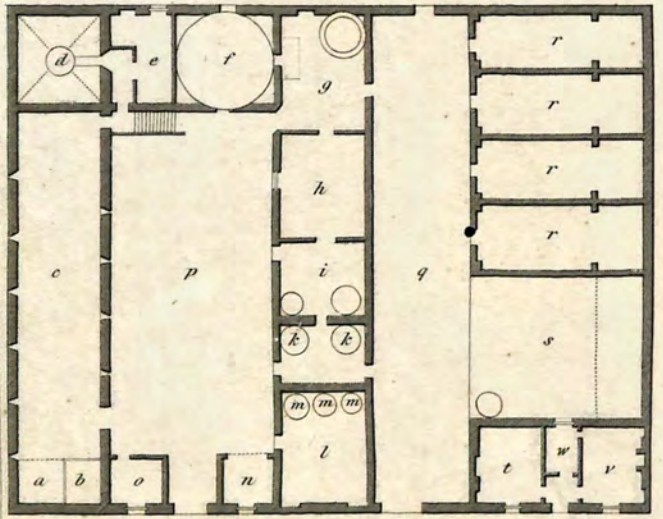
In the centre of this population, and close to the coal-works, is placed the farm of Inver-Brora, occupied by Mr. Thomas Hood, from Hume Castle in Berwickshire. He entered to the farm at Martinmas, 1818. It consists of about TWO HUNDRED AND FOURTEEN ACRES; a portion of it, consisting of about FIFTY ACRES, was attached to

the coal-work, and was brought into cultivation and enclosed by the landlord when in his occupation.

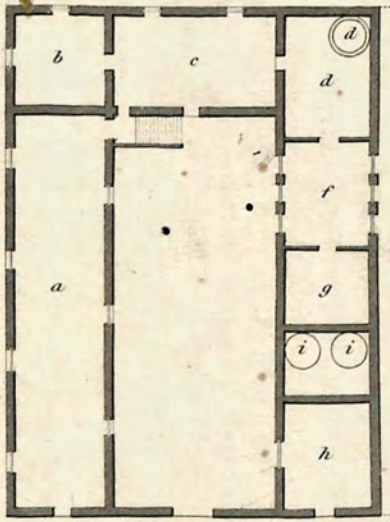
There are about FORTY ACRES of links or downs. The remainder of the farm consists of some small patches, formerly cultivated by the people, interspersed, as usual, with pieces of pasture and cairns of stones, with some land covered with heath, which has been much pared. The tenant is bound to bring the whole into cultivation during the currency of his tack, being allowed at the rate of FIVE pounds an acre for five acres of the worst. A house and offices is now erecting at this place similar to those at Cyder-hall, but upon a less scale.

The first farm beyond the people's lots is Clynelish, which has been lately let to Mr. Harper, from the county of Mid Lothian. This farm consists of NINETY-ONE ACRES of arable land, and ninety-five acres of muir, which he is to render arable before the expiration of his tack. Upon this farm there is an excellent house and a complete set of farm offices, erected by the late tacksman, Hugh Houston, esq., of Creech, who is returning to his own estate to superintend those improvements which he is now carrying on. Upon this farm also there has been just erected a distillery at an expence of SEVEN HUNDRED AND FIFTY POUNDS. This was done in order to afford the smaller tenants upon the estate a steady and ready market for their grain, without their being obliged to dispose of it to the illegal distiller. The situation was chosen as being near the coal, and a larger proportion of unimproved land was added to it, in consequence of the command of manure which the distillery will afford the tenant. The

PLAN AND ELEVATION
OF A DISTILLERY ERECTED AT CLYNELISH 1819.



Ground Floor



First Floor.

Scale of Feet.

10 20 30 40 50 60 70 80 90 100 110 120 130

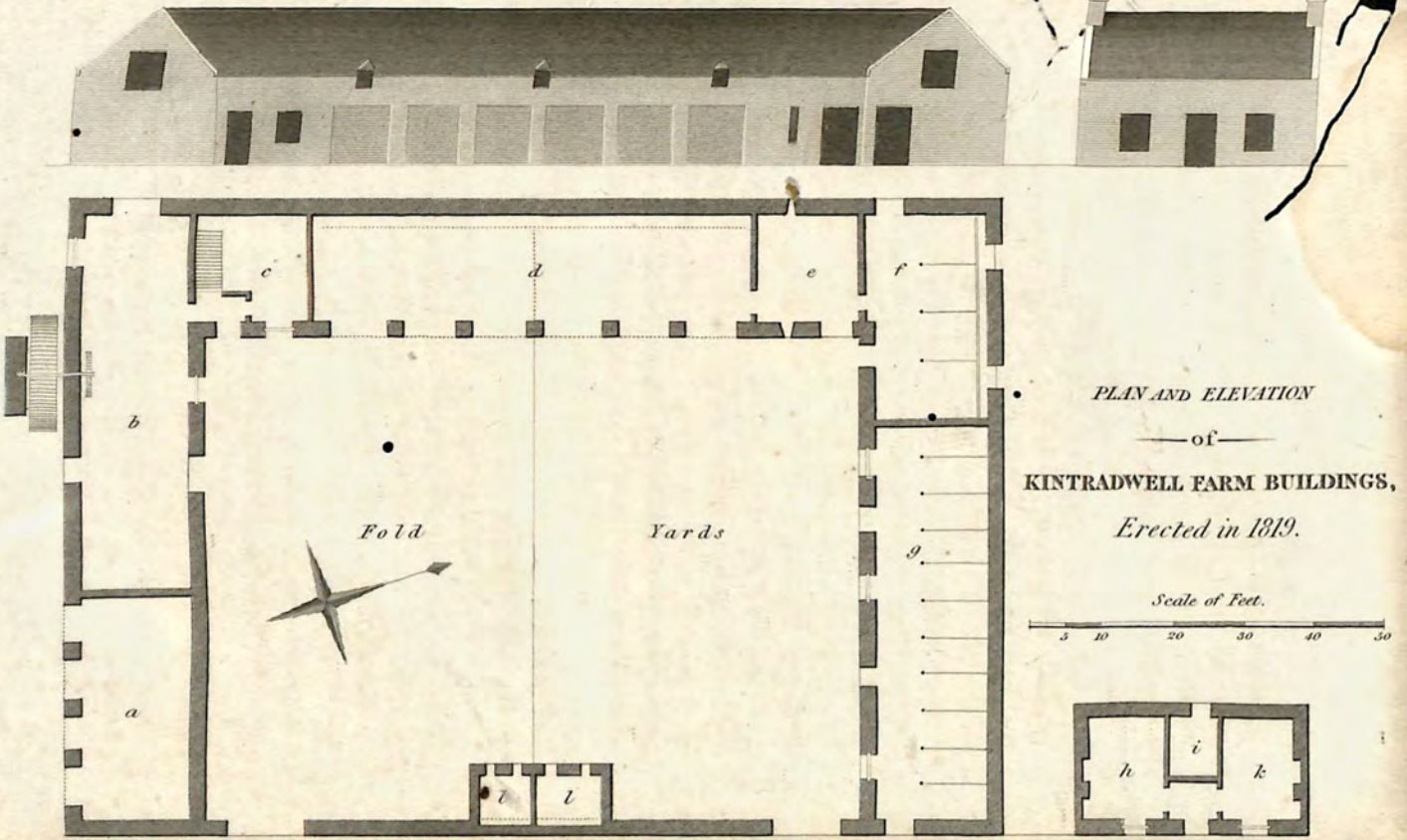
Pub. by Longman & Co. July, 1820.

farms in this neighbourhood have also the great advantage of being near a constant supply of sea-ware and the guttings of the herrings.

The next farm, Kintradwell, has been let to Mr. Thomas Houston, an active and intelligent gentleman of this country. His entry was at Whitsunday, 1819. To this farm is attached an extensive sheep-farm, situated in the heights of Kildonan, called Knockfin, between the county of Caithness and Baden water in one direction, and between Mr. Sellar's farm of Rhiloisk, and Major Clunes's farms of Suisgale and Torrish in the other direction. The farm of Kintradwell, previous to Mr. Houston's entry, was occupied, as has been already pointed out, entirely according to the old method; and is the last, and perhaps the most striking instance of that system which was to be found, not in Sutherland only, but in Scotland. It was granted in wadset many years back. By the wadsetter it was let to a tenant, who again sub-let it to a numerous class of inferior tenants, and even some of them again let it to others. It was divided into three portions. The mains which remained in the hands of the tacksman — Wester Kintradwell, which was under people, and Easter Kintradwell, which was similarly occupied. The mains were regularly divided into square enclosures by Mr. Gordon of Carrol, a very enterprising gentleman of his time, who occasionally lived at it. In the cultivation of the land, that portion of each field only was ploughed which could be done without much trouble, and at no great expence; consequently in every enclosure there was to be found large patches of uncultivated land full of stones, or drowned with water. It was beyond the enterprise of

the day to think of attempting to remove the one, or to cure the other by draining. Those parts which were occupied by the people were still less cultivated; the houses were set down in the most irregular, and most inconvenient manner; and as the land was laid out without any attention to the convenience of occupation, attempt at regularity, a larger quantity than usual of was left waste, in addition to the usual proportion of patches of pasture, which were intermixed with the small portions of land which had been rendered arable. The exertions of the people, as to improvement, did not deserve the name, nor were they entirely to be blamed for this circumstance; for the nature of the services must have interfered materially with the cultivation of their farm, at those periods when an attention to their own affairs was most necessary. The old rental of a portion of this farm, which is contained in Appendix, No. I., points out very clearly the nature of the services to which these poor people were subjected, and who are stated to have suffered so much by having been made immediate tenants to the landlord. Under the new arrangement the people are removed to the vicinity of Brora. The rent they pay for a lot of two acres is 2*s.* 6*d.* an acre, and having now the complete command of their time, and the undivided enjoyment of the fruits of their industry, they can apply themselves to the cultivation of these lots and the prosecution of the herring-fishery. Many of them, however, have taken smaller lots, for which they pay ONE SHILLING *per annum*; and, as they are taking to the cod-fishing, they will soon become fishermen entirely.

There has been just erected an extensive set of farm offices, at an expense of NINE HUNDRED POUNDS, fitted



PLAN AND ELEVATION

—of—

KINTRADWELL FARM BUILDINGS,

Erected in 1819.

Scale of Feet.

5 10 20 30 40 50

Geo. Alexander, Golspie, del.

Pub. by Longman & Co. July, 1820.

Sidf. Hall, sculp.

for the accommodation of this farm, which are at the same time so arranged, that in the clipping season they are well suited for this purpose, and for the storing of wool; the thrashing machine is driven by water. Assistance has also been afforded in the construction of the ring-fence; but the tenant is bound to subdivide the whole to the satisfaction of the factor, and to bring into cultivation all the waste land in the farm. He has got a bailiff from Roxburghshire to superintend these improvements, and he has already begun so vigorously to the quarrying of the surface-stones, as to leave little doubt that he will in a short time fully fulfil the covenants of his lease, notwithstanding the magnitude of the undertaking, arising out of the very rough nature of the ground and the extent of draining which is required. It is difficult to convey to a stranger, especially to a native of the south of England, an adequate notion of the extent and labour of such an improvement. The nearest idea which perhaps can be given of it by description, is to suppose the roughest and most hilly common closely set over with rocks of all sizes, many of which it is necessary to get rid of by the operation of gun-powder, or by lighting fires upon their top, in consequence of which they give way more readily to the stroke of the hammer. The appearance of the field after such an operation is completed, and before the stones are drawn off, either to build dykes or to fill drains, is that of one continued collection of stones, placed so near to each other as to hide the surface of the land.* The wester

* It is, however, a remark which is almost universally true, that the more this sort of land is overloaded with stones, the deeper and better the soil is.

part of the farm Mr. Houston intends to lay down into permanent grass for the use of his tups. The remainder of it he means to retain in cultivation for the purpose of raising turnips for his ewes and lambs in the spring. Thus in a few years will disappear from the coast of Sutherland that ancient system of cultivation, which, in the perversity of the human mind, has not been without its defenders. And for removing which, and for substituting a more enlightened and improved system some have ventured to blame the proprietors of this estate.

The fourth district extends from Lothbeg to Helmsdale, a distance of between seven and eight miles. The mountains on this part of the coast approach nearer to the shore, and rise more perpendicularly than in that part of the coast which has been hitherto described.

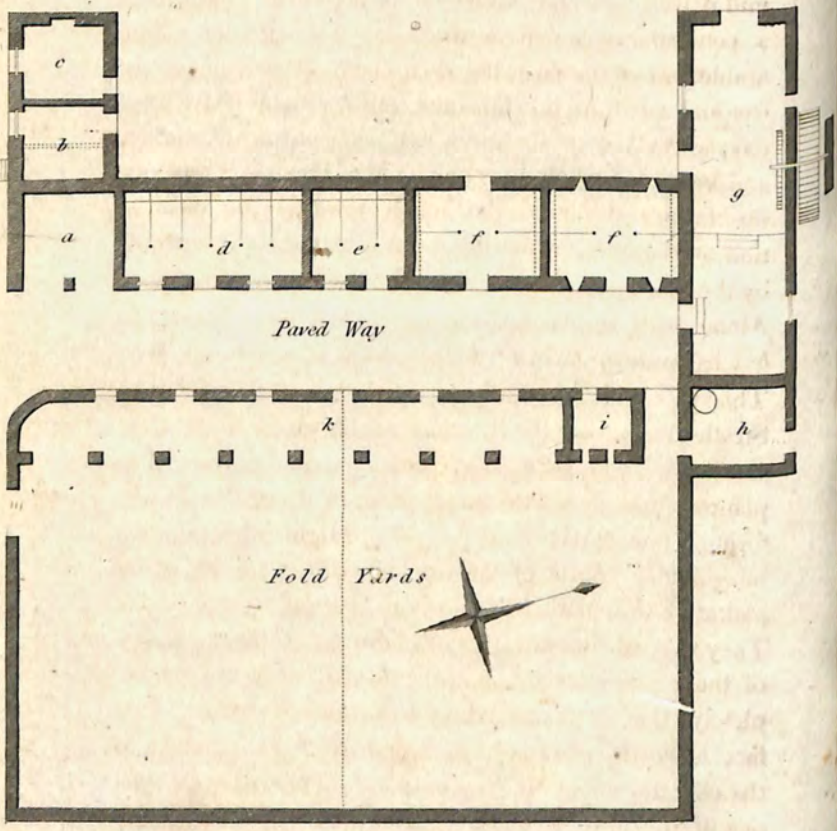
It differs farther, in this particular, from the other districts, that, with the exception of Morvich, it contains the only clay soil in the estate. A great portion of it was covered with water, forming a fresh water lake, which was separated from the ocean by a narrow but compact neck of land, composed of coal measures, dipping towards the sea. About the beginning of the seventeenth century, this neck was cut through by John, the sixth Earl of Sutherland of that name, and the seventeenth who bore the title. By giving a new direction to the river, this lake was drained, and about ONE HUNDRED acres of excellent land was obtained. It still requires, however, in the course of the old river, a main ditch to be cut, with a proper outlet to the sea, which would render many acres of land, now in a marshy state, fit for the plough.

The first farm in this district is Lothbeg, in the occupation of Mr. Gabriel Ried, a native of Northum-

PLAN AND ELEVATION OF

LOTH-BEG FARM BUILDINGS,

Erected in 1813.



Scale of Feet.

3 10 20 30 40 50 100

Geo. Alexander Gelspie del. Pub. by Longman & Co. July, 1820. Sid.t Hall Sc.

berland, one of the most intelligent stock farmers, and whose judicious and gentlemanlike conduct has been one great means of the success which has attended the extension of the sheep farms in this district, and of forming a direct intercourse between it and the clothing districts of Yorkshire. Mr. Reid's entry to this farm was at Whitsunday, 1816. An extensive set of farm-offices has been erected on this farm, with a thrashing-mill driven by water, to which is attached a corn-mill, a convenience much wanted in this district. The arable part of the farm has been enclosed with dykes six feet and a half high. For these improvements Mr. Reid pays at the rate of six and a half *per cent.* on the outlay, and keeps the whole in repair. Mr. Thomas Houston, the former occupier, did much towards the cultivation of the farm, which has been still farther improved by the present tacksman, since the enclosure of his land. Along with this coast-side farm, Mr. Reid holds the extensive sheep-farm of Kilcolmkill, where he resides. This place is beautifully situated, about five miles up Strath-Brora, on the borders of Loch-Brora. It is surrounded with extensive plantations, both natural and planted, and is a late acquisition of Lord Stafford's, forming one of the most delightful Highland residences imaginable. A set of farm-offices, suited to the occupation of the farm, has also been erected at this place. They were at first covered with tiles, but the SEVERITY of the weather among the hills destroyed them so completely, that it was necessary to substitute slates. This fact is worthy of notice, as demonstrating the nature of the climate among the mountains. This sheep-farm is one of the most extensive upon the estate, extending from the Brora to the Helmsdale in one direction, and

from the summits of the mountains, which run parallel with the coast, to the sources of the waters which descend into the *Skinsdale* and the *Free*, two rivers which fall respectively into the Brora and the Helmsdale.

Major William Clunes occupies the next farm, Cracaig. After having served his country in the late war, this gentleman has retired to the cultivation of the farm where he was born, and secures the attachment of those who have any intercourse with him, by his liberal conduct and gentlemanlike hospitality. His farm is managed according to the modern system of agriculture, and cattle of an excellent and superior quality are reared under his immediate management. He has also engaged extensively in sheep farming, and occupies the grazings of Suisgale and Torrish, situated between the Helmsdale and Caithness, and between Mr. Houston's farm of Knockfin, and the farm of Naviedale, which forms the last district of the estate of Sutherland towards Caithness and the coast. Connected with this farm, Major Clunes also occupies the grazing of Eldurable, situated on the south side of the Helmsdale. He has built a neat cottage, at Torrish, for his residence on that farm. At Cracaig there is a good house and considerable offices.

Beyond this place are situated the farms of Whitehill, occupied by Mr. George Munro, and of Kilmote, occupied by Mr. Robert Mackay, to which he entered at Whitsunday, 1815. For this farm he pays no rent, it having been given to him by Lord Stafford, together with TWO HUNDRED AND FIFTY POUNDS, to induce him to give up possession of the farm of Wester Helmsdale, in order that it might be lotted out to settlers from the hills. Since Mr. Mackay's entry to Kilmote,

a new set of farm-offices have been built. Mr. Mackay, however, has fully seconded the exertions of the landlord, and he has already added several fields to the arable part of his farm by that mode of improvement already so minutely described.

Mr. Leith, at Culgower, a native of Caithness, has followed a similar plan of improvement. His fields are now completely cultivated up to the fences, and the waste corners, which formerly disgraced it, have disappeared. This tacksman has the merit of being the first tenant in Sutherland who sowed, on an extensive scale, English barley in place of bear. This he imported from the county of Norfolk. The success of the experiment rewarded his attempt, for his crop both exceeded in bulk, and was got in earlier than the common grain of the country. He has continued this practice, and his example has been followed by others.

At Wester Garty, Mr. John Duncan has shown, that even the steepest part of the mountains may be brought into cultivation with success. Within these two last years he has trenched, out of the side of the steep heathery mountain above his house, a field of considerable size, which he manured with a compost of the offal of the herring fishery and soil, and which produced the best crops. His success has shown the people the value of the guttings of the herrings as a manure, and it is now eagerly sought after, and carefully removed, in place of its being permitted to accumulate, and to become an intolerable nuisance, as was the case at the commencement of the fishery. Mr. Duncan has lately added considerably to the house upon his farm: — the offices were erected by the proprietor.

The same progress in improvement has been followed

upon the next farm, Midgarty, by the former tenant, Mr. Alexander Simpson, and by the present tacksman, Mr. Alexander Mackay. The farm-buildings and enclosures were constructed by Lord Stafford: the thrashing-machine is driven by water. Beyond these farms are situated the extensive, populous, and flourishing settlements of Port Gower, Gartymore, and Easter and Wester Helmsdale, with the exception of Naviedale, already mentioned, forming the most distant portion of the estate of Sutherland in this direction. This last-mentioned farm lies in a most beautiful amphitheatre, defended on all sides by lofty mountains, except upon the south, on which side it is bounded by the sea, towards which it slopes. The great road to Caithness winds through this farm. It forms the most perfect arable farm on the coast-side of Sutherland; and the sheep-walk attached to it, extending, as already mentioned, to the farm of Torrish, lays the whole together in the most convenient and perfect manner. Being subject, however, to a long lease, it has not received the same impulse of improvement which has been given to the rest of the coast-side of Sutherland.*

* In respect to the farming of this district generally, it may be remarked, that it labours under the defect which the husbandry of Scotland is in general liable to, except in some of its most improved districts. First, it has little or no real old pasture. Secondly, the corn crops are not hand-weeded with the care that they are in general throughout England; certainly not with any thing like the attention which is paid to this branch of husbandry in the more improved districts of this country. Docks, thistles, the wild mustard and poppy, and the large white or horse daisy, called in Scotland the white gowan, are allowed to injure the crops, and to remain growing in vigour all round the enclosures.

The description which has been just given of the mode in which the great bulk of this estate is occupied, will point

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Thirdly, much attention is paid to the neatness of their ploughing, and the straightness of the ridges. In this they certainly excel a great portion of England; for it is in this department of the practice of husbandry that the intelligent English farmer is most deficient and least anxious. Fourthly, the grass fields are universally covered, in the most disgraceful manner, with vast crops of ragweed, growing with a luxuriance unknown in the south. Nothing strikes an Englishman so strongly as this circumstance does on visiting the north side of the Tweed. The want of sheep stock has been ascribed as one reason for the prevalence of this noxious weed all over Scotland. But, it must be admitted, that by far too little attention is paid to eradicate it; and its universal existence has ceased to strike the farmer, who is accustomed to it, with those feelings it ought naturally to excite.

Much misapprehension has existed in the North, and even to a certain extent in England, on the comparative merits of Scotch and English husbandry, and the state of improvement to be met with in the two parts of the island. It is not now intended to enter into any discussion on the subject, farther than to remark, that a little forbearance on the part of both, and a more intimate acquaintance with the methods of each other, would be of mutual service. The fact is, that the rapid progress which this science has made within little more than the last half century, in some parts of Scotland, where the alluvial deposit from the adjoining whinstone and schistose hills, has produced a soil of the most admirable quality, and which, in general, is further aided by the local advantages arising from the vicinity to the sea, for manure and for exportation, has led many to forget how great an extent of that country is doomed for ever to remain in a state of nature, and how wretched the husbandry of a large portion of that part of the kingdom is, which is

out the manner the arable land on the coast-side, and the pastures of the mountains, are made subservient to

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capable of cultivation. The unsteady nature of the climate, added to the natural saving habits of the people, has given the farmers of the improved districts an activity of management, especially in reaping and getting in their crops, which it is infinitely to be regretted is so little understood in most parts of England, where, though they enjoy a far better climate, it is not to that extent as to justify them in the want of exertion too often displayed in securing their crop. But this rapid success in improvement, so visible in certain districts in Scotland, has led rather too rapidly to the conclusion, not only that they are decidedly better farmers than their English brethren, but that the latter are, in fact, but indifferent husbandmen. Nothing can be so totally without foundation. That a considerable portion of England might be better farmed than it is may be true, but it would be a matter of astonishment, that in a country cultivated as this country is, from one end of it to the other, if much indifferent farming did not prevail. There is no country where so many valuable practices exist, many unknown to the agriculturists of the North, and well worthy of their consideration and adoption. In no point of practice does the English tenant stand so pre-eminent, as in the superior cleanness of his crops, in the management of his grass lands, and in the use of his water meadows. In conclusion, it must, however, be very distinctly stated, that nothing is so dangerous as to conclude that, because a system answers well in one part of the kingdom, it must do equally well in every other. Whether it will or not must depend on the nature of the climate—the quality of the soil—the size and distance of the great towns—the habits of the people—the nature of their food—the proportion which the land suited for cultivation bears to that which never can be made fit for the purposes of agriculture—with many other circumstances which it is not necessary to enumerate; while it must be above all admitted, that there is no-

each other, and will give a pretty correct idea of the disposition of the whole estate. There are, however, extensive tracts occupied as sheep-walks, which have no coast-side farm attached to them. It may be easily conceived that it was impossible, in the first instance, to determine on the most profitable and beneficial mode of arranging so vast a property. Besides, the management was necessarily controuled, in carrying into effect the proposed alterations, by many circumstances over which they had no power, and to which they were necessarily obliged to submit. The first and most obvious of these circumstances was the duration of the different tacks: other considerations also, of various sorts, had their effect. In commencing such an arrangement, those districts were pitched upon for the experiment that were the least fitted for the habitation of man, and where, if its success had not justified persevering in it, less harm was done than if some of the lower parts of the estate had been submitted to this arrangement in the first instance. In consequence of this, the first sheep-farm which was formed consisted of the highest districts of the estate, including Ben Klibrich and Ben Ormin, two of the highest mountains in the county. This farm extends from the village of Lairg to the lower point of Lochnaver, in one direction; and from the river Tyrie, to the sources of the waters which fall into the Brora and the Helmsdale, and their tributary streams, in the other. It was let from Whitsunday, 1809, to Messrs. Atkinson and Marshall, two gentlemen of Northumber-

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thing so dangerous as the belief that, because much has been accomplished, any thing like perfection has been attained. This, however, is a fault the most liberal improvers are too apt to fall into.

land, of the greatest respectability. It need hardly be pointed out, that the defect of this arrangement is, that it consists almost entirely of summer grazings, the natural consequence of which is, that this extensive range can never be stocked to its full amount, as it must be limited by the proportion of wintering attached to it. To remedy this, in some degree, the farm of Achenduich, lower down the Shin than Lairg, was added to this tack, as also Letter-beg, in Strathnaver. But even this assistance has been far from adequate to the necessities of the farm. It has been roughly computed, that the range occupied by these gentlemen amounts to nearly ONE HUNDRED THOUSAND ACRES; and that, since the commencement of their occupation, more than a third of that quantity has become excellent pasture. It is apparent, that the proper way of occupying this land hereafter, is by attaching the different mountainous districts of which it is composed, to the different *glens* which are severally connected with it. In this view all the farms which have been lately let in its vicinity, have been let only for the period of the endurance of this tack. Such an arrangement, no doubt, has considerably lowered the rental of the estate, but it will ultimately tend greatly to its advantage, and at no distant period, as these tacks expire at Whitsunday, 1828.

Below Auchenduich is the farm of Invershin, occupied by Messrs. Culley and Morton, gentlemen of Northumberland, who occupy, along with it, extensive sheep-farms belonging to Sir Charles Ross, in this and the neighbouring county.

Extending along the north bank of Loch Shin, situated between Strath-Tyrie and Lord Reay's march, is the farm of Shiness, sub-let to Mr. Gilchrist, of Ospis-

dale, the second in point of surface on the estate. The tack of this farm commenced in 1808.

The upper part of Strath-Brora is occupied by Colonel Alexander Sutherland, a connection of the family. From his land on both sides of the Brora, adjoining with the Dunrobin Glen and Kilcolmkill farms, Mr. James Hall, from Roxburgh, occupies the farm of Seberscross.

The east side of Strathnaver, between Mr. Sellar's farm of Rhiloisk and the coast-side settlers, is occupied by the farm of Skelpick, of which Mr. John Paterson, from Northumberland, is the tacksman; and by the estate of Armadale, in the holding of Wm. Innes, Esq. of Sandside, in the county of Caithness. The tacks of these two farms respectively commenced in 1818 and 1814.

The coast-side of the estate of Assynt is occupied by fishermen, and its interior is divided into six sheep-farms, all possessed by native tacksmen, whose leases are made to expire in 1831, in order to admit of a new arrangement of the lands at that period.

APPENDIX, No. III.

REPORT of the Committee of the United Association of the Noblemen and Gentlemen in Sutherland and Caithness for the Protection of Property, for the Year from Whitsunday, 1818, to Whitsunday, 1819.

THE Committee cannot help congratulating their constituents on the change of circumstances which has taken place since the first formation of the society; and, as a large proportion of those who now receive this Report are new members, who have not seen the former Reports, the Committee have appended to this a Table of the comparative numbers of Sheep missing, and a copy of all the Committee's Annual Reports, as well as the usual Appendix for this year, in order that every gentleman may form his own opinion of the effect of the operations of the noble family of STAFFORD, and also of the Association for the protection of that species of property, which undoubtedly constitutes the chief wealth of this part of the country.

The Association was formed, by the first members, in defence of their property in the year 1815. In that year the number of sheep missed by the eleven original members was - - - - 1591

In 1816-17 the comparative number was (for the measures used in defence had scarcely taken effect) 1596

In 1817-18 they were beat down to - 853

And in 1818-19 to - - - - - 794

Some particulars in the situation of individual members may be briefly noticed.

Messrs. Morton and Culley complained grievously of their losses, chiefly on the march with Assynt. In 1815 they missed - - - - 606

In 1816-17 they made no report, but they are not understood to have suffered less. In 1817-18, the effect of a local factor was felt in Assynt, and many tenants were removed from their borders. Their loss diminished to - - - - - - 97

In 1818-19 to - - - - 71

Mr. Sellar, on the small stock he had during the first years of the society (not 2000 sheep), suffered as heavily as any person.

In 1815-16 - - - - 148

In 1816-17 - - - - - - 173

During summer, 1817, Lord Stafford offered a reward of 30*l.* for discovering of any theft against Mr. Sellar; and in that year his Lordship warned out every tenant and sub-tenant on his march. In 1817-18, with *double the number* of sheep, his losses decreased to - 56

In 1818-19, with an increased number of sheep, his losses fell to - - - - 37

The tenants were removed to the sea-coast, adjoining Mr. Innes's and Mr. Patterson; their losses went thus:

1815-16	1816-17	1817-18	1818-19	
			60	109
26	26	49	49	

Enough may be gathered from a comparison of the several reports to satisfy every person that, by prosecuting steadfastly the purposes of the society, and looking the evil fairly in the face, this country will be gradually rendered as safe as any other in Scotland. It

may be hoped, indeed, that, if this society do its duty, and *do it effectually* during the existence of the present contract, a renewal of it may not be required; for, by that time, it is likely that the country people will be thoroughly separated from the flocks, and their minds bent on prosecuting that field for lawful enterprise which the proprietors take such pains, and with such success, to open for them. The shepherds, in like manner, having, for so many years, had their conduct, be it good or bad, exposed to the full view of the country, will have learned to use more attention, and become more valuable servants than they were in Sutherland in 1815.

(Signed) FRANCIS SUTHER.
PATRICK SELLAR.
GABRIEL RIED.
THOMAS HOUSTON.
WILLIAM CLUNES.
JAMES HALL.
CHARLES CLARK.

APPENDIX, No. IV.

TABLE shewing the comparative Numbers of Sheep unaccounted for to the several Members of the Sutherland Association for four Years, from Clipping Time 1815 to Clipping Time 1819 inclusive.

No.	MEMBERS' NAMES.	Losses from Clipping time 1815 to Clipping time 1816.	Losses from Clipping time 1816 to 1817.					Losses from Clipping time 1817 to 1818.						Losses from Clipping time 1818 to 1819.					
			Not distinguished.	Ewes and Gimmers.	Wethers and Tups.	Dinmonts.	Hogs.	Total.	Not distinguished.	Ewes and Gimmers.	Wethers and Tups.	Dinmonts.	Hogs.	Total.	Not distinguished.	Ewes and Gimmers.	Wethers and Tups.	Dinmonts.	Tups.	Total.
1	Atkinson and Marshall, Messrs.	310	marks of wool for 126	90	41	65	45	367	—	109	27	25	84	245	—	142	24	57	55	278
2	Clunes, Major, Crackaig	no report	—	24	—	6	12	42	—	2	—	—	53	57	—	14	3	—	15	32
3	Clark, Charles, Esq., Glendow	no report	—	no report		—	—	—	—	—		no report		—	—	45	9	12	33	97
4	Clark, John, Esq., Erribell	no report	—	no report		—	—	—	—	—		no report		—	—	17	2	—	5	24
5	Dunlop, John, Esq., Balnakiel	no report	—	no report		—	—	—	—	—		no report		—	—	43	29	—	2	74
6	Forbes, Major Donald, Milnain	no report	—	no report		—	—	—	—	—		no report		—	—	36	12	—	14	62
7	Gilchrist, Major, Ospisdale { Rhine / Shines	21 / 142	—	18	3	—	4	25	—	14	3	—	11	29	—	9	—	—	4	13
	Mr. Gilchrist only entered to Shines in 1818, it was formerly possessed by Messrs. Mackay and Mathieson who were members.		—	no report		—	—	—	—	—		no report		—	—	70	30	5	25	130
8	Horne and Hall, Messrs., Langwell	no report	—	23	—	8	22	53	—	37	5	4	36	100	{ D. Horne, Esq. alone }	23	9	—	27	59
9	Hall, Mr. James, Scibercross	no report	—	no report		—	—	—	—	—		no report		—	—	4	—	—	1	5
10	Houston, Thos., Esq., Ridgill and Knockfin	no report	—	no report		—	—	—	—	—		no report		—	—	39	19	—	46	94
11	Innes, Wm., Esq., Sandside	26	—	6	7	—	13	26	—	15	15	3	16	49	—	29	5	2	24	60
12	Morton and Culley, Messrs. Inverarnsbay	606	—	no report		—	—	—	—	64	14	2	17	97	{ 49 Wedders, Gimmers, and Dinmonts }	10	—	—	12	71
13	Mackay, Capt. K., Torboll	no report	—	no report		—	—	—	—	8	1	12	37	58	—	—	no report			—
14	Mackenzie, Mr. Alex., Stronechruby	no report	—	no report		—	—	—	—	—		no report		—	—	64	—	—	99	163
15	Mackay, Mrs. Scobie, Kealdale	no report	—	no report		—	—	—	—	—		no report		—	—	60	29	—	14	103
16	Munro and Reed, Messrs. Badnabay	no report	—	no report		—	—	—	—	—		no report		—	—	47	6	30	63	146
17	Paterson, Mr. John, Skelpick	no report	—	no report		—	—	—	—	—		no report		—	—	38	1	—	10	49
18	Reed, Gabriel, Esq., Kilcalmkill	168	—	35	4	46	42	127	—	15	12	7	25	59	—	42	5	2	27	76
19	Robson, Mr. John, Kirktown	59	—	5	—	6	15	26	—	23	6	4	12	45	{ 18 Gimmers and Dinmonts }	8	1	—	3	32
20	Stafford, the Marquess of	3	—	—	—	—	—	—	—	4	—	—	4	8	—	4	2	—	—	6
21	Sellar, Patrick, Esq., Morvich, &c.	148	—	9	—	—	—	9	—	21	4	15	16	56	—	18	—	3	14	37
22	Scobie, Capt. Wm. Ardvare	no report	—	12	8	80	53	133	—	—		no report		—	—	24	—	—	11	35
	Total	1483	126	252	63	211	216	848	—	312	85	70	314	781	67	754	186	113	506	1626

From the above State it would appear that the losses each year are in total

To be added, Messrs. Morton and Culley, and Mackay and Mathieson, Shiness, who gave in no report in 1816-17; so we shall suppose their losses that year equal to the preceding year 1815-16, which were

In 1817-18, Messrs. Mackay and Mathieson, Shiness, left the Society, and gave in no report; supposed equal to 1818-19

Messrs. Horne and Hall, and Major Clunes' gave in reports for the three last years, but not for the first year; we shall therefore suppose that their losses for 1815-16 to average the three last years

To be deducted, Capt. K. Mackay, (No. 13.) who gave in a report for 1817-18, but not for any of the other years. His number for that year is

The gentlemen from Assynt, and the Reay country, &c., Nos. 3, 4, 5, 6, 9, 10, 14, 15, 16, 17, & 22, only joined the Association last year, and made no reports previous to 1818-19; their numbers for that year therefore also fails to be deducted.

And the comparative numbers are

1815-16	1816-17	1817-18	1818-19
1483	848	781	1626
—	748	—	—
—	—	130	—
108	—	—	—
1591	1596	911	1626
—	—	58	—
—	—	—	832
1591	1596	853	794

APPENDIX, No. V.

ABSTRACT of Imports and Exports at Helmsdale, for the Year 1819, with the Tonnage of Registered Shipping, arrived for the same period.

	Salt.	Stave Wood.	Staves.	Wood Hoops.	Iron Hoops.	Coopers' Pegs.	Empty Barrels.	Empty Kitts.	Cordage.
	Bushels.	Feet.	Hund.	Bunds.	Cwt.	Bund.	No.	No.	Cwt.
London.	—	—	—	2,600	—	20	—	—	—
Inverness.	—	33,600	1,075	275	—	—	400	—	—
Perth.	—	—	690	—	—	—	—	500	—
Thurso.	—	—	—	200	—	1	—	—	16
Montrose.	—	—	—	—	—	—	—	—	—
Berwick.	—	—	—	—	32	—	—	1180	5
Leith.	8,405	—	64	376	—	43	4471	—	17½
Newcastle.	—	—	—	—	—	—	—	—	—
Liverpool.	34,779	—	28	—	—	—	—	—	—
Banff.	400	—	—	—	—	—	80	—	—
Kirkaldy.	620	—	16	—	—	—	1680	—	—
Dunbar.	300	—	—	—	—	—	180	—	—
Wick.	2700	—	—	—	—	—	634	—	—
Sunderland.	—	—	—	—	—	—	—	—	—
	47,204	33,600	1,873	3,451	32	64	7445	1680	38½

	Canvas.	Cork.	Bark.	Meal. Oat	Meal. Barley	Potatoes.	Tar.	Butter.	Palm Oil.	Coals.	Vinegar.
	Yds.	Cwt.	Cwt.	Bolls.	Bolls.	Bolls.	Barls.	Cwt.	Cwt.	Chal.	Hhds.
London.	—	—	—	—	—	—	—	—	—	—	—
Inverness.	—	—	100	—	—	—	—	—	—	—	—
Perth.	—	—	—	—	—	—	—	—	—	—	6
Thurso.	—	5	15	50	12	—	—	—	—	—	—
Montrose.	—	—	—	14	—	—	—	—	—	—	10
Berwick.	—	—	—	20	—	2	—	—	—	—	—
Leith.	3100	33	4	795	—	—	82	102	—	3	—
Newcastle.	—	—	—	—	—	—	—	—	—	32	—
Liverpool.	—	—	—	—	—	—	173	105	26	—	—
Banff.	—	—	—	417	—	—	—	—	—	—	—
Kirkcaldy.	—	—	—	20	—	—	—	—	—	—	—
Dunbar.	—	—	—	—	—	—	—	—	—	—	—
Wick.	—	—	—	120	—	—	—	—	—	—	—
Sunderland.	—	—	—	—	—	—	—	—	—	32	—
	3100	38	119	1436	12	2	255	207	26	67	16

	Whiskey.	Rum.	Shrub.	Porter.		Ale.	Bottled. Porter.	Bottled. Ale.	Empty Bottles.	Wines. Red	Wines. White
	Gall.	Galls	Gall.	Hhds.	Half Hhds.	Hhds.	Doz.	Doz.	Gro	Galls.	Galls
London.	—	—	—	—							
Inverness.	—	—	—	2							
Perth.	—	—	—	—							
Thurso.	—	—	—	—							
Montrose.	—	—	—	—							
Berwick.	—	—	—	—		3	102	50	5	26	12
Leith.	38	15	8	21	13						
Newcastle.	—	—	—	—							
Liverpool.	—	—	—	—							
Banff.	—	—	—	—							
Kirkcaldy.	67	—	—	—							
Dunbar.	—	—	—	—							
Wick.	—	—	—	—							
Sunderland.	—	—	—	—							
	105	15	8	23	13	3	102	50	5	26	12

	Biscuit.	Flour.	Sugar Refined	Sugar Muscovado	Tea.	Coffee.	Cast & Wrot. Iron.	Bar Iron.	Woollens.	Haberdashery.	Stone Ware.
	Cwt.	Cwt.	Cwt.	Cwt.	lbs.	lbs.	Cwt.	Cwt.	Bales.	Packs	Packs
London.	—	—	—	—	—	—	—	—	—	—	—
Inverness.	—	—	—	—	—	—	—	—	—	—	—
Perth.	—	—	—	—	—	—	—	—	—	—	—
Thurso.	—	—	—	—	—	—	—	—	1	—	1
Montrose.	—	—	—	—	—	—	—	—	—	—	—
Berwick.	18	3	—	—	—	—	1	—	—	—	—
Leith.	13½	4	—	2	8	14	7	20	1	—	8
Newcastle.	—	—	—	—	—	—	—	—	—	—	—
Liverpool,	—	—	1	—	—	—	—	—	—	—	1
Banff.	—	—	—	—	—	—	—	—	—	—	—
Kirkcaldy.	—	—	—	—	—	—	—	—	—	—	—
Dunbar.	—	—	—	—	—	—	—	—	—	—	—
Wick.	—	—	—	—	—	—	—	—	—	—	—
Sunderland.	—	—	—	—	—	—	—	—	—	—	—
	31½	7	1	2	8	14	8	20	2	—	5

	Shoes.	Leather.	Soap.	General Groceries.	Boxes	Dressed Hemp.	Dressed Lint.	Tobacco.	Snuff.	Molasses.	Hops.	Hulled Barley.
	Hhds.	Cwt.	Cwt.	Casks	Boxes	Cwt.	Cwt.	lbs.	lbs.	Cwt.	Cwt.	Cwt.
London.	—	—	—	—	—	—	—	—	—	—	—	—
Inverness.	—	—	—	—	—	—	—	—	—	—	—	—
Perth.	—	—	—	—	—	—	—	—	—	—	—	—
Thurso.	2	—	—	—	—	—	—	—	—	—	—	—
Montrose.	—	—	—	—	—	—	—	—	—	—	—	—
Berwick.	—	3	3	10	21	18	30	6	30	3	1	2½
Leith.	—	—	—	—	—	—	—	—	—	—	—	—
Newcastle.	—	—	—	—	—	—	—	—	—	—	—	—
Liverpool.	—	—	—	—	—	—	10	—	—	—	—	—
Banff.	—	—	—	2	—	—	—	—	—	—	—	—
Kirkcaldy.	—	—	—	—	—	—	—	—	—	—	—	—
Dunbar,	—	—	—	—	—	—	—	—	—	—	—	—
Wick.	—	—	—	—	—	—	—	—	—	—	—	—
Sunderland.	—	—	—	—	—	—	—	—	—	—	—	—
	2	3	3	12	21	18	40	6	30	3	1	2½

EXPORTS.

	Barrels.	Tons.
Herrings - -	17,719	-
Salted Cod fish -	20	-
Dried - - -	-	4
Kelp - - -	-	30
	17,739	34

About one half of the herrings were branded for bounty, the remainder cured for re-packing — shipped as follows:

12,893 to London and other Ports coast-wise.
4,226 to Ireland.
600 to the Baltic.

17,719

5,246 Tons of Registered Shipping arrived at Helmsdale within the period above mentioned.

Extracted from the Books of
JOHN SHAW, Principal Coast Officer.

TONNAGE of *Registered Shipping* Inwards and Outwards at the Harbour of *Brora*, with the *Exports* from thence from 5th January, 1818, to 5th January, 1820.

Year.	Shipping.		Coals.	Salt.	Bricks.	Tiles.	Wool.				Wheat.	Barley.	Herrings.
	Inwards.	Outwards											
	Tons.	Tons.	Tons.	Bushs.	No.	No.	Cwt.	Qrs.	lbs.	Stones.	Quars.	Quars.	Barrels.
1818	304	1830	765	11580	4000	2300	436	2	5	2037	130	38	—
1819	1013	1902	450	8190	10700	500	602	2	19	2812	166	298	1158

APPENDIX, No. VII.

Letter from Patrick Sellar, Esq. to James Loch, Esq.

DEAR SIR,

I HAVE been confined by a severe fever of cold or influenza, which has prevailed much in this country during the present spring; and have thereby been less punctual, in writing to you than I wished.

I fear, what I have to say in reply to your letter may not add much to your stock of knowledge.

In 1809 when I lived in Morayshire, Sutherland was very little known or thought of in that country. The honest folks there, used to call the whole ridge of country, which they saw on the opposite side of the Frith, "The Rosshire hills;" and there was no communication betwixt the countries, except when an occasional passenger would cross by boat, or a deer was brought to Burghead or Findhorn for General Grant of Ballindalloch. Eight of the Morayshire proprietors, including Mr. Young and my father bought Burghead, about that time, built a harbour there, and, turning their thoughts to the encouragement of trade in that place, it occurred to them, that, by the establishment of a packet vessel to sail at stated times betwixt the Burgh and the north side of the Moray Frith, the prosperity of their new purchase might be advanced. The doers for the noble

family of Stafford listened, favourably to the suggestions of the Burghead owners; a packet was set on foot, and, in the first trip of the vessel, in May 1809, Mr. Young and I, and several other Morayshire men embarked, to see this *terra incognita*. We came into Dunrobin Bay in a beautiful morning, a little after sunrise; and I shall never forget the effect produced upon us by the beauty of the scenery — the mountains, rocks, wood, and the castle reflected on the sea as from a mirror.

We staid about a week in the country; and, after surveying the coast from Dornoch to Loth, and rambling a few miles up Strathfleet, we returned home. *There was no road in the country — no harbour, not a single steading of houses* except Major Houston's at Clynelish. We saw no appearance of tillage, beyond the old cairn or mearing, which had limited the work of former generations; not above six ploughs or harrows armed with iron, and *the dung was then in the process of being carried out to the field on women's and ponies' backs*. There was no attempt to drain; and, except a very small portion of turnip and grass at Dunrobin and Rhives, neither turnips, grass, nor wheat, in twenty miles of tillage land. The Gaelic seemed universally the language of the country; which reposed under the domination of the old half-pay officers and other tacksmen, who held it by their sub-tenants. The tract betwixt the Ord of Caithness and Helmsdale was possessed by a multitude of poor people, under the heirs of Pope of Naviedale, who was second middle-man under the proprietors. Helmsdale was held in the same way under Mr. Ross. The tract betwixt that and Culgower under a Capt. Baigrie. Culgower under William Pope, Crackaig was then occupied by Colonel Clunes, the

father to Major Clunes. Lotlibeg under Mr. Thomas Hauston, Kintradwell under Mr. Joseph Gordon, Clynelish under Mr. Hugh Houston, Uppat belonged in property to Achany; Dunrobin farm lay full of docks and thistles, (which proved afterwards difficult to eradicate) and it had no offices. The New Inn at Golspie was, in the course of building. All betwixt Rhives and Craigton lay in run rig among an indolent tenantry, who burrowed under turf and raised oats and barley in succession *ad infinitum*. Craigton was under John M'Kay, and his sub-tenants, Aberscross under John Polson, Morvich under Mrs. M'Leod, Kinnauld under Capt. Duncan Sutherland, and up Strathfleet the possession appeared the same.

The people seemed to be all of one profession. That is to say, every man was his own mason, carpenter, tanner, shoemaker, &c. and, Mr. Falconer the factor told us, that work could not be got done in the country, for love or money. Every man wore his own cloth, ate his own corn and potatoes, sold a lean Kyloe to pay the rent; had no ambition for any comfort or luxury beyond the sloth he then possessed.

We heard mentioned with execration the names of some Englishmen, for whom, in the interior of the country, many families had been removed nearer to the coast to give place to sheep farming; but it seemed the general belief that their stay in the country would be short; and, we learned from Mr. Christie, Mr. Falconer's clerk, that the premiums formerly paid for the destruction of foxes, eagles, and other vermin, had just been recalled by the Dornoch county meeting. The tacksmen took from their sub-tenants, and the factor took from the Golspie villagers a tithe of any fish

caught, to supply their tables; and no exportation from the country was heard of by us, except some tons of kelp from the southern shore, and a few droves of lean kyloes annually sent to the south country markets.

Morayshire is by no means a well improved country. I think it is now, generally speaking, far behind Sutherland as now peopled. But at that time Sutherland seemed a century behind it—a circumstance imputable as well to the difficulty of access into Sutherland, as to the difference of language and customs; and, to the *impossibility* of any stranger settling in Sutherland, getting forward among a people so constituted, with any thing like industry.

As the sea shore shewed, plainly, the limestone, on which the country rested, and the rents were not at all in proportion to those drawn from inferior land in Morayshire, Mr. Falconer found very little difficulty in tempting me to embark with Culmaily farm, calculated at 300 Scots acres, which (with the pasture in the mountain behind into the bargain) he offered me at 25*s.* per acre with an advance at 6½ per cent. of 1500*l.* to assist in the improvement.

At this time nothing could have led me to believe that in the short space of ten years, I should see in such a country roads made in every direction; the mail coach daily driving through it, new harbours built, in one of which upwards of twenty vessels have been repeatedly seen at one time taking in cargoes for exportation; coal, and salt, and lime, and brick works established; farm steadings every where built; fields laid off and substantially inclosed, capital horses employed, with south country implements of husbandry, made in Sutherland, tilling the ground *secundum artem* for turnips, wheat and

artificial grasses; an export of fish, wool, and mutton to the extent of 70,000*l.* a-year, the women dressed out from Manchester, Glasgow, and Paisley; the English language made the language of the country; and a baker, a carpenter, a blacksmith, mason, shoemaker, &c. to be had as readily and nearly as cheap too as in other countries.

At the time I came here, the fifty miles of country situated betwixt this and Inverness, was just in the process of being opened by means of roads, *from the south.* Through that country, the tide of knowledge and of industry, so long pent up, broke in upon us; and, being received with every favour by the noble proprietors, who expended immense sums of money, in encouraging strangers to settle among us, in the establishment of the means of industry to the people, we have jumped up at once to the level of our neighbours, with a velocity, I believe, quite unprecedented.

You desire an account of my own particular progress; and to that I shall confine myself; but I cannot help mentioning a circumstance which you will scarcely believe, of a man who farms a good many thousand sheep, now feeding in districts lately occupied with inhabitants; and, that is, that I came to this country, full of the belief that the growth of wool and sheep in the highlands of Scotland, was one of the most abominable and detestable things possible to be imagined. The report of the highland clergymen in Sir John Sinclair's book of Statistics, the Essays written in the periodical publications, and the general assertion of every highland gentleman whom one met with in the low country, and of every low country man who had never been in the highlands, convinced my mind as it did that of others,

who possessed similar means of forming their judgment, that the inroads then making on the ancient habits and manners of the children of the Gael were cruel and impolitic in the extreme.

Before I had been one or two years in Sutherland, I explored the interior of the country. I found it to consist of extensive tracts of peat bog; broken into mountains, and rocks, and wild scenery, and interspersed here and there with patches of land under imperfect tillage, near the river banks; each patch, or haugh, or field, surrounded by a country of bog, the exhalations raised by the sun from which, were condensed during the night on the crops attempted to be grown, and which it, during four years out of six, mildewed and destroyed. I found an infinity of fine alpine pasturage, which by reason of the softness of the bog or the inaccessible nature of the ground, the cattle of the highlanders never cropped. I found that while the cotton grass was in spring flowering with great luxuriance and fading untouched, the cattle were dying by scores, one gentleman, Capt. Matthieson of Shiness, lost two hundred I think in one spring, and Colonel Sutherland of Culmaily, buried, the first year I came to Sutherland, eighteen milk cows and a bull in one hole or ravine. Moreover, the inhabitants of the hills were fed every second or third year with meal imported by the proprietors from other countries, and all this misery was endured in contending in a country *so situated*, against nature; countless myriads of herrings, cod, ling, &c. at the same time swimming around the coast, and in every creek and bay of it *untouched*; why? — because the people in the interior remained in misery *there*, preventing it from being possible to apply *its* pasturage to any useful pur-

pose; and those on the shores were the sub-tenants or gentlemen whose style of education and pursuits, through life, made them quite indifferent to the treasures spread out before them.

On inspecting the grounds possessed by Atkinson and Marshall, the new stock-farmers, and comparing the condition of these with that of the grounds pared for turf, &c. in the occupation of the inhabitants, and on viewing the condition of the plants, trees and living creatures on the former farm, and contrasting it with the filth of the native huts, and the lean and miserable condition of every horse, cow, and sheep possessed by them, I was at once a convert to the principle now almost universally acted on in the highlands of Scotland, viz. that the people should be employed in securing the natural riches of the sea-coast; that the mildew of the interior should be allowed to fall upon grass, and not upon corn; and that the several hundred miles of Alpine plants, flourishing in these districts, in curious succession, at all seasons, and out of the *reach of any thing but sheep*, be converted into wool and mutton for the English manufacturer.

Let any person, I don't care who he be, or what his prejudices. Let him view the inside of one of the new fishermen's stone cots in Loth — the man and his wife and young children weaving their nets around their winter fire. Let him contrast it with the sloth, and poverty, and filth, and sleep of an unremoved tenant's turf hut in the interior. Let him inspect the people, stock, cattle, horses, trees, and plants, in a stock farmer's possession, and compare it with the pared bottom from which turf in all ages had been taken, with the closely cropped roots of grass, and bushes and miserable

lazy-bed's culture that surround a highlander's cabin, with the starved kyloes and scabbed ponies and sheep that stagger about his place, picking up half an existence; and, let him *believe*, if he can, that men are injured by civilization, and that, during the last ten years, a most important benefit has not been conferred on this country.

However this may be, the effect upon my mind was, that I determined to adventure on such a tract of mountain pasture as might in connexion with the Culmaily farm, enable me to bring forth part of what appeared to be the natural riches of the country, and to profit, if I could, by so doing. With this view, I, as you know, possess by eighteen south country families, Strathnaver, Culmaily and Morvich; and I work them in stock and croft farming, in the manner which I shall proceed briefly to explain, while the former inhabitants are exerting every nerve in the cultivation of their sea-side lots, and spending a most active and industrious life in the pursuit of the riches of the ocean.

Messrs. Atkinson and Marshall, the first adventurers in stock-farming on the earldom of Sutherland are stock and crop farmers, who reside near the river Aln in Northumberland. They breed and buy lean stock, which they feed for Morpeth and the Yorkshire markets; and, within the last ten years, they have embarked, if I may be allowed to compute their operations by the rule of proportion with my own, not less than 20,000*l.* in putting breeding flocks on the mountains of Sutherland. These flocks are divided into separate parcels or hirsels; each under the care of one, two, or, as the case may be, three shepherds; and their whole number of shepherds again, are under the direction of one steward or overseer, who corresponds with the stock-masters, and

directs and superintends every movement on the farm. After repeatedly witnessing their operations in Sutherland, I went some years ago to pay them a visit in their own country; and, when I found them, in the Alnwick and other south country markets, of the same cut and appearance with scores of their neighbours, whose time seemed divided betwixt the superintendence of a common sized tillage farm, and the sports of the field, I could not help contemplating, with wonder the boldness of that spirit of adventure which had led men, living quietly in that fine country, to overleap all (one would think) to them impassable mountains and barriers betwixt the Aln and the Shin; and, in the most distant county of Scotland, and the wildest and most untried part of that country set down their flocks. Under any other proprietors than the Marquess and Marchioness of Stafford, and but for the prompt protection afforded by them, I am convinced that *rent free*, the concern had proved a very ruinous one. In truth, the thefts committed on their property, and the damage done by the disturbance of the flocks, and by vermin of every description, exceeded the highest rent paid in Britain. But, these days are past, — their effects beginning to be forgotten; and, I hope and expect that the gentlemen will be well rewarded for their courage and good conduct. Whether the thing prove of advantage to them or not, however, I am sure it has been one of great benefit to Sutherland — in so far as it has established *on the great scale*, cheviot sheep and cheviot shepherds, and connected Sutherland in the most intimate manner with the first stock county in the kingdom.

The Cheviot sheep is the aboriginal inhabitant of the mountain on the borders betwixt Northumberland and

Scotland from which he takes his name; but within the last fifty years very much improved in his quarters and in the staple of his fleece by crosses with sheep, as I learned in Herefordshire, recommended some fifty years ago, to the Border farmers by Mr. Bakewell, the patron of the Culleys. In some cases, perhaps in too many, he has also got a little dash of Leicester blood in him. His wool is of a coarser and broader quality than the South Down, though not a great deal inferior in fineness, and many of the best border farmers are satisfied that too much has been done to fine his coat, and that more than has been given him in quality is subtracted in quantity and in strength of constitution.

The Border store farmers divide their flocks into distinct parcels or hirsels. For instance, ewes form a flock by themselves. When the lambs come to be three months old, and are separated from their mothers, they are kept on a separate herding or farm. When these again are twelve months old, at which time they give their first fleece, the males are generally separated from the females; the female returned to the ewe hirsils, where she gives a lamb at two years old, and the male is sent to wether ground, from which, after one year and a half's keep, he is at two years and a half old sent to the feeder; and, the ewe after giving three lambs goes to the same destination.

Messrs. Atkinson and Marshall, and Morton, and Culley, conduct their flocks in Sutherland upon a plan, differing a good deal from what I found common on the Borders; that is, in place of returning their yearling ewes, or what they call gimmers to the ewe hirsel at that early age, they send them for eighteen months or nearly so, to land called "yell gimmer land," from

which they do not return to the ewes until two years and a half old, or "young ewes;" and in like manner, the wethers stay two years and a half on wether ground before they go to the feeder. By these rules the north country ewes have no lamb until three years old, the wethers don't go to the feeder until rising four, or to the knife until from four to five years old, the ewes at five to six; and the character of highland bred Cheviot mutton is getting high in the feeding countries.

Soon after Messrs. Atkinson and Marshall, and Morton, and Culley, had established their flocks in Sutherland, a gentleman, who nearly twenty years before had left Northumberland, and had been the first to prove, though on a small scale, that Cheviot stock might be naturalized to Sutherland, I mean, Mr. Gabriel Reed, tenant of Armadale on the north coast, was induced, in 1812, to embark with Kilcolmkill then under the old mode of occupation of inhabitants who were brought to the coast from Clyne and Kildonan, and he has stocked it with, I dare say, ten thousand Cheviot sheep. About the same time Mr. Innes of Sandside, Mr. Thomas Houston, and Major Clunes, and myself who had for some years adopted this species of occupation, increased their concerns. The Reay country gentlemen followed the same example, as did several men of small capital, and the sum total of the matter is this, that from a few hundred cheviot sheep which is, I suppose, about the number that existed in Sutherland, in 1805-6, I can now compute one hundred thousand Cheviot fleeces annually sent to the manufacturer, and twenty thousand ewes and wethers yearly sent to the feeder, partly to Northumberland, but the greater part to Yorkshire; and I dare say, their mutton is applied to feed the very men who manu-

facture our wool. This annual creation from the Alpine plants of twenty thousand carcases of mutton, and one hundred thousand fleeces of wool, and also the creation of twenty thousand barrels of herrings, nothing of which existed in 1809, must affect the population. I don't say in England, &c. where the food is used, but at home; where all classes enjoy so much more of the comforts of life the reward of their increased industry. You remember I sent you lists of names of the people of 1811 and 1815, taken and sworn to by the proper officers, which proved how the increase was then begun. In place of the few scores (perhaps from two to three score) of highland families who have since emigrated, I am convinced there are five scores of south country families imported; and that, a trial will show no diminution of people in 1820.

But to return to the subject chalked out for me. The Cheviot sheep is a true moss and mountain sheep, when left to themselves as they ought, as much as possible, in such a country to be, they scatter and straggle in threes and fours over the waste, and a score of them is rarely to be seen together. The merino sheep which I have bred pretty extensively in the highlands is of quite a different nature. They are decidedly *mountain* sheep but not *moss* sheep. When pinched for food they resort to the Alpine plants which grow in the peat bog, but they will not do so of choice. They range all in one lot; that is, of whatever number the flock or hirsel consists, it is found all in one place, feeding like a drove passing through a country, and they are either on one of the spots of fine grass in the mountain, or travelling from one of these to another. Nothing will induce

them to do what the shepherds call "lying abroad," upon the waste, or to mingle with sheep of any other kind. After taking their walk every day over their range of pasture, in the way I have described, they form a sort of camp at night on the highest part of their ground, and may be certainly found there at day break next morning, lying so closely that they touch each other, the strongest sheep outside, and the weak in the centre. Owing to this disposition of the merinos, they are not suitable to these wastes of peat bog; not, that they don't thrive there, and yield wool in abundance, and of the first quality; but that, as three fourth parts of the wastes consist of Alpine plants which they reject, the same quantity of Sutherland ground will keep three hundred Cheviots, that will maintain one hundred merinos, and that with one-half the care, and one-third part of the risk in winter. I have *bred* up my merino flock from two hundred to six hundred of as fine sheep of the kind, and as thriving too, as ever stepped on hill ground. They got no hand feeding; nothing beyond their own finding during last winter, except about six acres of inferior turnips at Morvich to the hogs, and fourteen days hay during the depth of winter. They have paid me very well; their mutton at five years old is fine marbled and high flavoured mutton, and every body whom we have deceived with it, said it was the best mutton possible; yet, I am about to cross them into Cheviot, and that on this account, that they are not the kind that will suit as a general stent for Sutherland. They won't pay in Strathnaver, for instance; and, in *breeding*, they interfere with my more extensive and important flocks, which are the genuine *moss sheep*, that will pay for im-

provement in Sutherland, and that will convert, not only the fine grass, but the Alpine plants into wool and mutton.

In explaining to you the mode of managing the flocks in Sutherland, I shall refer to my own practice, not that there is any thing in it better than that of my neighbours, probably very much to the contrary; but, that I can more easily explain, through it, our manner of availing ourselves of the various plants that grow on our farms. These plants have each its peculiar time of coming into season. A critical time intervenes between the fading of one plant and the coming of that next in season, and the two most critical times for stock are, first, betwixt the latter end of March to the 1st of May, that is, betwixt the fading of the cotton grass, and the springing of the deer hair; and secondly, betwixt the 1st of August and 1st of September, or the fading of the deer hair, and the coming of the harvest moss. If pains be not taken at all seasons, but particularly at these two seasons, injury may very readily be done to the stock.

My flocks consist of four ewe hirsels, two gimmer hirsels, for lesting up these ewe flocks; two hog hirsels, and two wether hirsels. Besides these, one of my hog hirsels, Culmaily, takes in my sale wethers, to prepare them for market, and keeps my tups; and Morvich takes in my sale ewes, to the same end, and keeps my fine ewes; that is, the choicest ewes of all my flocks, kept apart for breeding my tups or male sheep from.

"Our lambs are speaned about the middle of July, and carried off directly to a piece of deer hair ground, and tended about ten days, until the bleat or crying for their mothers leaves them. They then get very dull and settled, and are, presently, collected and shed, or di-

vided into three sorts. First, the small lambs, or paleys, of both sexes, into one lot, which is sent directly off to the best fogage or clover in Culmaily (the wether hog herding). Secondly, the wether lambs, which are sent also to Culmaily, and settled on Benvragie mountains, above Loch-Lundie. And, thirdly, the ewe lambs which are sent off to the ewe hog herding in Strathnaver.

At the time the wether lambs are settled about Loch-Lundie, the sale wethers are below in the hog ground; but these are sent to market, or to the feeder, before the middle of August, and then the wether lambs are gradually allowed to descend the mountain, to the hog land, the hay fog, the harvest stubbling, and, finally, to the turnips, of which I have about fifty acres in preparation. These are calculated to last the lambs or hogs until the middle of March (besides leaving, perhaps, ten or fifteen acres for other purposes). The wether hogs are then delivered to one of the wether shepherds, who happens that year to have the sale sheep, or three-year old wethers, in Strathnaver. These wethers he exchanges for the wether hogs with the hog shepherd, and these are brought into the weather hog land, to be prepared for market. Meantime, the wether hogs are spread out to feed on the land that had been possessed by the wethers, and there they remain for two years, at the end of which time they come into the wether hog land, and by and by go to market.

The wethers are thus bred up to considerable bone; for the more bone, the higher price will, *cæteris paribus*, be paid by the feeder. With the ewes, bone is of less consequence; she belongs more properly to the *breeder* than to the *feeder*. She gives five fleeces and three lambs to the breeder; and we consider more what she

is to pay in her stay with us, than in her sale to the feeder. The ewe that is not bred to much bone is more hardy, and may be laid more numerously on a hirsling, than large hungry boney ewes can; and therefore, with the ewe lamb, we pursue a different course from what we do with the wether.

After being speaned, and the bleat settled, it is sent to hog land in Strathnaver—ground not too high nor too grassy, but, if possible, having a good mixture of heather and cotton grass, with a tolerable quantity of fine land; here it remains with me until clipped, with other farmers only until mossing-time, in March; then it is sent to inferior and more mountainous ground, where the two-year old ewes, or rough gimmers, lie, and where there is generally twice the quantity of summer that there is of winter feed. On this high ground they remain about sixteen months, until the cast of the ewes of that year go off to the feeder. Their place they fill up, leaving behind them, in the gimmer land, the ewe hogs of the preceding year, which have to wait their turn to come to a ewe herding.

Morvich is at present filled up with the Merino flock, and fine ewes, but my intention is, how soon the Merinos may be bred in, or gave to the feeder, to bring in my cast of ewes to this low ground at four-years old, and take their last lamb here, at an earlier season than is possible in the Highlands.

This concludes what I have got to say about the flocks, except to explain how we send them to market. When Atkinson and Marshall began, and for some years posterior, the farmer had no resource but mount his poney, and accompany his drove to Falkirk, or the border markets; and his wool, in like manner, he had

to send, on his own account, to Hull or Liverpool, where it was put into money by the commission broker.

Of late years the farmers here, under the patronage of the noble family of Stafford and Lord Reay, have associated themselves together for their common protection, and for general purposes. A similar association was formed among the farmers of Inverness-shire and of Ross-shire, and the result of correspondence between these societies has been, the establishment of one great annual fair at Inverness, in June, yearly, for the sale of sheep and wool. At this annual market the woolstaplers of Leeds, Huddersfield, Wakefield, &c. as well as the dealers in stock from Yorkshire, attend, and the whole year's produce is sold by its character, and put into money, in a few hours.

The three associations I have mentioned have each three deputies, who form a central committee, that meet at Inverness, at the close of this market, and discuss whatever subjects may be most interesting to the three bodies; viz. the regulation of the fair, the preservation of the ancient drove-roads, through the mountains, to the south, which have in several places been encroached on by the proprietors through whose ground they go, the prevention and suppression of theft from the members, which went on, in the first years of sheep farming, to an extent almost incredible, &c. In Sutherland, this sort of theft must, if it had not been checked by the discreet measures of the proprietors, have soon proved quite ruinous to those whose capital was embarked in sheep.

You enquire about my tillage farming. I work by the six-course shift of one turnips, two barley, three, four, and five grass, and six oats. I have increased Culmaily farm 100 acres, and built, as you know,

fences, offices, and thrashing, meal, and barley mills. I have added sixty tillage acres to Morvich. The balance in my books against these farms, at the end of my year, 1819, that is, 1st August, 1819, and that independent of what I paid upon sheep-stock, was 9394*l.* 14*s.* 0½*d.* I am sowing up to grass in both farms as quickly as possible, for there is no profit at present in growing corn in Sutherland.

PATRICK SELLAR.

Morvich, May 1. 1820.

APPENDIX, No. VIII.

An Estimate of the Number of Sheep in the County of Sutherland, 1820.

	Cheviot.	Blackfaced.	Total.
Sutherland Estate -	64,100	9,000	73,100
Reay - ditto -	39,000	1,600	40,600
Bighouse ditto -	4,000	- -	4,000
Sir Charles Ross's ditto	8,000	- -	8,000
Achany ditto -	- -	300	300
Lord Ashburton's ditto	500	1,000	1,500
Mr. Dempster's ditto -	1,000	- -	1,000
Cadbols ditto	600	- -	600
Pointzfield's ditto	1,200	400	1,600
	118,400	12,300	130,700

An Estimate of the Amount of Wool exported annually.

	Stones.
From the Sutherland Estate. - -	9,700
Other Estates - - - -	7,600
415,200lbs. at 24lbs. to a Stone	17,300

An Estimate of the Number of Sheep sent South annually.

	Wedders.	Ewes.	Total.
From the Sutherland Estate	9,700	6,530	16,230
Other Estates - -	7,700	5,800	13,500
	17,400	12,330	29,730

APPENDIX, No. IX.

Sketch of the Improvements made by some of the Tenants of the Marquess of Stafford, at Trentham and Lilleshall.

In the vicinity of Trentham, there is a considerable home farm, consisting altogether of about eight hundred and fifty acres, of which about one hundred and twenty only are under the plough. The remainder is all in grass, and occupied either as water meadow, — grazings for the milch cows, — for the stock required for the supply of the house, — as a sheep-walk, — as hay-land, — or let as ley. There has been also formed an extensive ley at Newcastle for the accommodation of the people of that town, in consequence of the enclosure of the common-field land near that place, of which Lord Stafford was the most considerable proprietor.

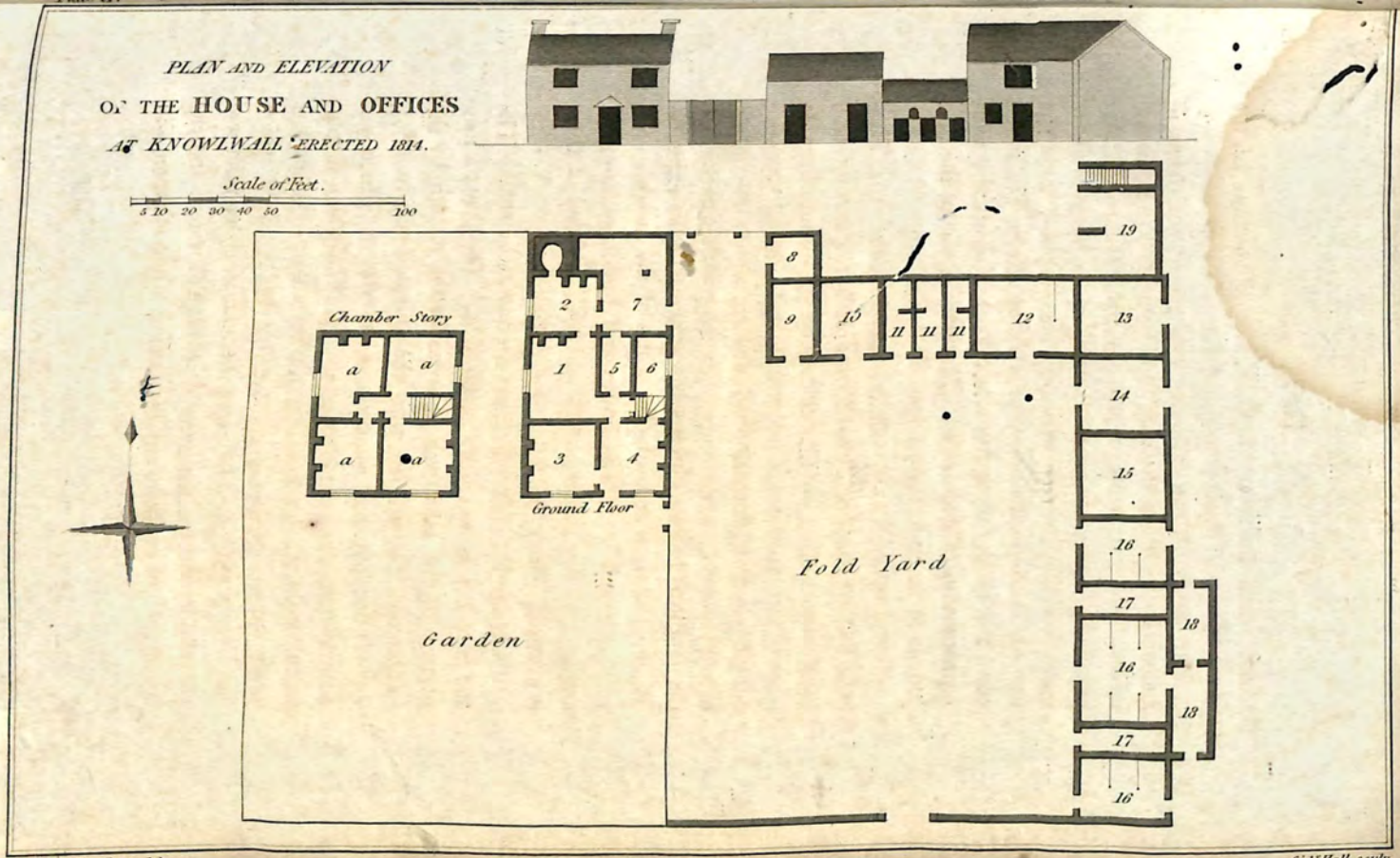
The farm is under the direction of a Yorkshire bailiff, Mr. William Marshall, who keeps it in an excellent state of culture; — he follows the Norfolk system of ploughing, that being the Yorkshire practice. The farm is of a nature to produce excellent crops, both of beans and turnips, which are grown in great perfection. This farm, like many others which have been originally ill cultivated and too hard cropped, throws up a vast quantity of coltsfoot. There is no weed so difficult to eradicate, and the only effectual way is to pull it with the

hand, when the state of the land and the size of the plant admits of this being done.

The stock on the farm consists of a good flock of Leicesters, with a flock of black-faced sheep for the table. The cattle are driven up from Dunrobin, and pay well, being in great demand while they improve much on the English pastures, but they must not be turned on the best at once or without care. The milch cows are of the most improved Yorkshire breeds, with a proportion of Alderneys. Marshall is one of the best judges of stock in the county.

Township of TRENTHAM. — KNOLL-WALL. Mr. Thomas Dutton tenant. This farm consists of strong soil, inclined to wet, a fit proportion of pasture and arable land. The cultivation not very good. Some draining done lately and preparations for more, which it required to a great extent; but the tenant being rather backward, the landlord has executed some at the tenant's expence. Water has been thrown over some of the meadows but without much art. The house and buildings are new, and in excellent order, brick and tile. A plan of them is given in Plate No. 21.

THE TOFT. Mr. William Goodwin tenant. The soil is of the same nature as the last. Too great a proportion of the land was kept under the plough by the last tenant. The present, who was educated near Stafford, intends occupying it chiefly as a dairy farm, which will add much to the condition of that portion which is kept in culture. A very considerable extent of draining has been judiciously done, assisted by the landlord which has been attended with more beneficial effect than was contemplated from the great discharge of water; and the tenant, who has lately entered, being a good farmer, will


PLAN AND ELEVATION
OF THE HOUSE AND OFFICES
AT KNOWLWALL ERECTED 1814.
Scale of Feet.
5 10 20 30 40 50 100
Chamber Story
a
a
a
a
Ground Floor
1
2
3
4
5
6
7
8
9
10
11
11
11
12
13
14
15
16
17
18
16
18
17
16
19
Fold Yard
Garden
Wm. Sorton Trentham del.
Pub. by Longman & Co. July, 1820.
Sidy. Hall sculp.

immediately proceed with more. One meadow has been watered, but a good deal of labour is still required to bring it to perfection. The house and farm buildings are brick, and tiled, and very substantial. They have just received a thorough repair.

HANCHURCH HILL FARM. Mr. Nathaniel Robison tenant. This is a good dry arable farm. Rather a large proportion of it is under the plough, but it is generally well cultivated. The present tenant has done much for the land: it has been underdrained by him to some extent; he received some assistance from the landlord. There is a fair proportion of water meadow in good order, — with a considerable addition lately made to it in a very good style. The buildings are new and good, built of brick, and tiled.

HANCHURCH. Mr. James Bloore tenant. The soil is somewhat similar to the last: a proper proportion of this farm is in grass. The tenant is remarkably industrious; he is bringing it fast into a good state of cultivation; having received it from his father and others in a very bad state, he has done, and is now doing, much underground draining and ditching. A small quantity of water-meadow. There is an old thatched half-timbered house in good repair. The buildings are brick, and tiled, modern, and in a good state of repair.

NORTHWOOD. Mr. Samuel Lakin tenant. This farm was formerly in part a common. Soil weak, wet, and retentive bottom; a proper proportion in grass, in a very good state of cultivation; no meadows. House and buildings are brick, and tiled, and in good repair.

TRENTHAM INN FARM. Mr. Thomas Goodwin tenant. A strong loam, with some clay land, inclined to wet: the greater proportion in grass, of a superior

quality; a good deal of underground draining lately done. Some excellent water-meadow, perhaps the most productive in the neighbourhood.

Ash Green. Mr. Richard Stanley. A wet soil with a retentive subsoil, mostly in grass, and dairied; — little efficient draining. More to be done, but the tenant is not very active. Some not well constructed water-meadow. House and buildings brick, and tiled, in good repair.

Strongford Mill. Mr. Thomas Griffin, sen. A strong soil: the greater proportion in pasture. The cultivation of this farm was very defective, but is much improved of late, and a considerable deal of draining and ditching performed. A great extent of meadow, but subject to be flooded by the Trent. The buildings, both connected with the farm and mill, (which is a flint mill,) are in tolerable order. This farm is in lease, and none of the buildings, held by this tenure, have been kept in such good order as those which are held at will.

New Park. Mr. Thomas Aston tenant, who has lately succeeded his father in this farm. The soil is very much inclined to wet, with a bad retentive subsoil. It is occupied in equal proportions as an arable and dairy farm; for the latter mode of occupation it is better suited. The land is fairly cultivated. Within the last two years much draining and ditching has been executed on this farm, and with excellent effect. In consequence of the great extent of draining required, the proprietor has assisted considerably where the fields were the wettest. The proportion of water-meadow is considerable. The buildings are brick, and tiled, and in excellent condition, and have been lately repaired.

Township of Blurton. — Newstead. Mr. Richard

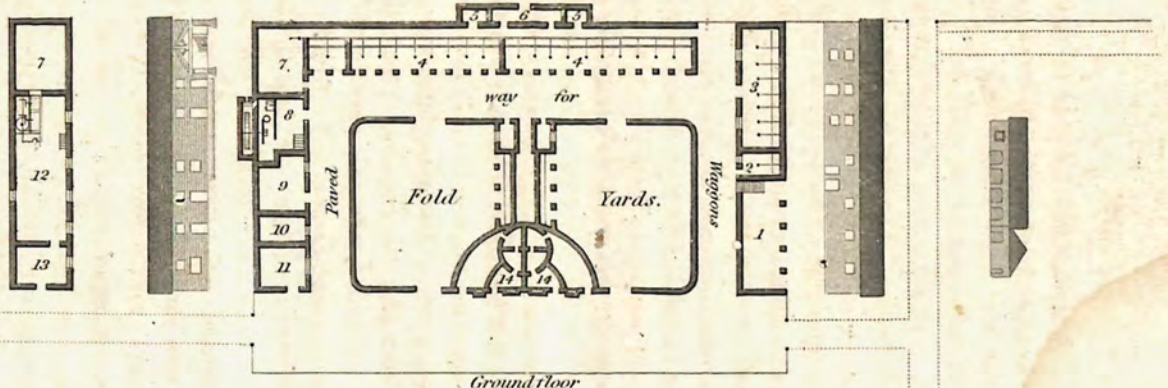
PLAN AND ELEVATION

of a

HOUSE AND FARM OFFICES,

at Newstead

Erected in 1813.



Wm Sorton, Trentham, del.

Pub by Longman & Co. July 1820.

Sid.t Hall, sculp.

Ford, tenant. A strong soil inclining to wet in many places. Too large a proportion was formerly under the plough, and the farm was hard cropped. These defects the tenant is remedying quickly, and that which he has executed, has been done with a judgment and decision most creditable to him. His farm was in a great measure destroyed with wet — the fields were small — the fences crooked — the ploughing very indifferent — the width of the butts not exceeding four feet — thus exposing a larger surface than necessary to the influence of the wet. Such a practice is most defective, as much land is lost by narrow ridges, by the furrows never producing the same quantity of corn as the other parts of the field. The lands are now drained: the water has been so conducted as to drive the thrashing machine, and to irrigate the meadows. The fields are new modelled and enlarged. The butts are formed twelve feet wide, and of an excellent shape. The furrows are much deeper, and in every way the farm work is of the best order. The ploughing with two horses abreast has been adopted. Superior crops of drilled beans and turnips are raised, according to the nature of the soil, in a style equal to any in England. Mr. Ford's example and precepts have had much influence in encouraging his neighbours to similar exertions. There has been executed on this farm since the year 1814, above ONE THOUSAND yards of ditching seven feet wide; above TWENTY-THREE THOUSAND yards of under-ground draining; about FOUR THOUSAND TWO HUNDRED yards of new fences, quicked and planted with hedge-rows, and near SIX THOUSAND EIGHT HUNDRED yards of old fences stocked up. The tenant has made about TWENTY acres of water meadow. As this farm was in a peculiarly bad state, the landlord gave material assistance in these works.

The house and buildings are brick, and tiled, and in the most complete repair. Mr. Ford, is an example to the whole county, for his liberal, enterprising, yet judicious conduct. A plan of his buildings, will be found in Plate No. 22.

BLURTON WASTE. Mr. John Townshend. This tenant is of one of the oldest families on the Trentham estate; his ancestors having held land under Lord Stafford's family for near two hundred years. The soil is of a poor, cold, and wet quality. Previous to its occupation by the present tenant, it consisted of the outlying portions of several other holdings, and was much neglected until he entered to it. It is occupied partly as a dairy, and partly as a corn farm. It is in a rapid state of improvement. The landlord made an allowance of lime to the tenant, in consideration of which he purchased a large quantity of manure from the Potteries. SEVEN THOUSAND THREE HUNDRED yards of underground draining, TWELVE HUNDRED yards of new fences, hedge and ditch, have been executed; and TWO THOUSAND FOUR HUNDRED yards of old fences have been stocked on this farm. Of this the landlord bore a considerable share. The tenant has made SIX ACRES of water meadow. The house and offices brick, and tiled, are new, and in complete repair; and a plan of them is given in Plate No. 23. They are in the common country style.

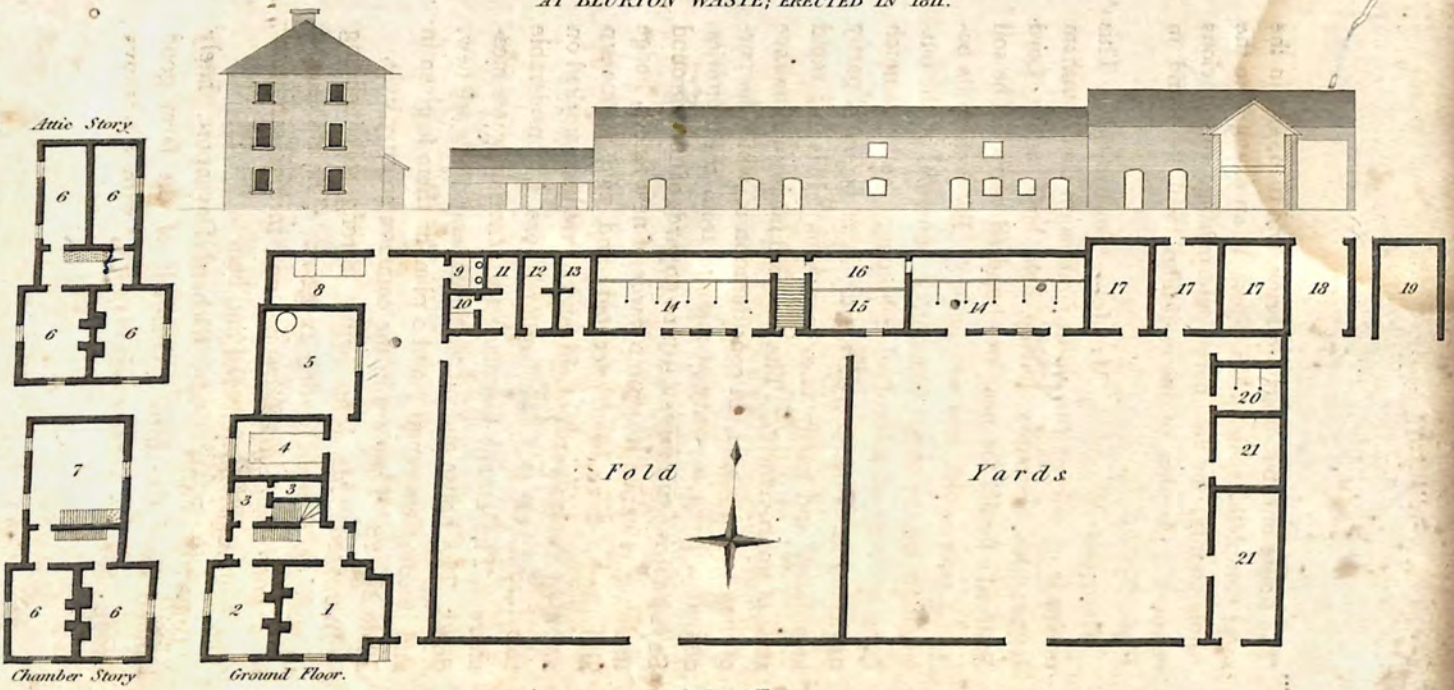
BLURTON. Mr. John Swift. Strong soil inclining to wet. A fair proportion in grass. The arable land in a good state of cultivation, and in high condition. The buildings half-timbered and bad.

BLURTON FARM. Mr. Richard Davenport, lately entered from Cheshire. One-half of the farm good strong soil, the other a wet clay soil, with a retentive

Appendix page 74

PLAN AND ELEVATION OF THE FARM HOUSE AND OFFICES,

AT BLURTON WASTE; ERECTED IN 1811.



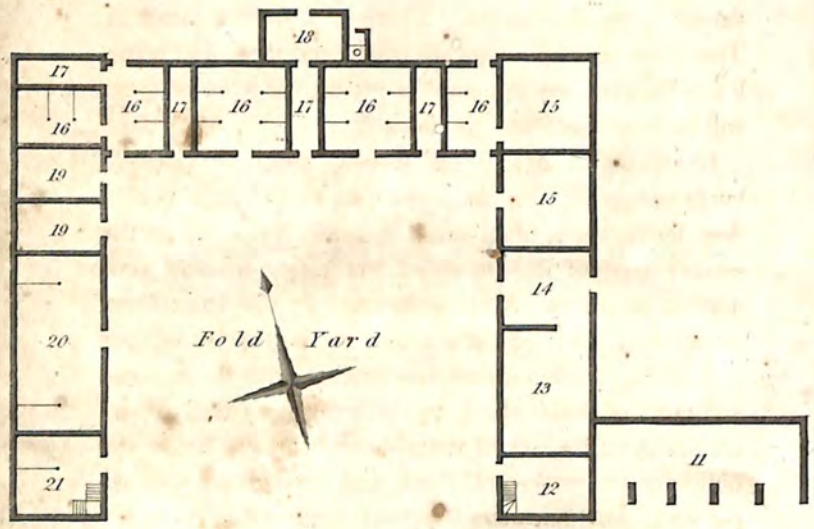
Wm Sexton, Trentham del.

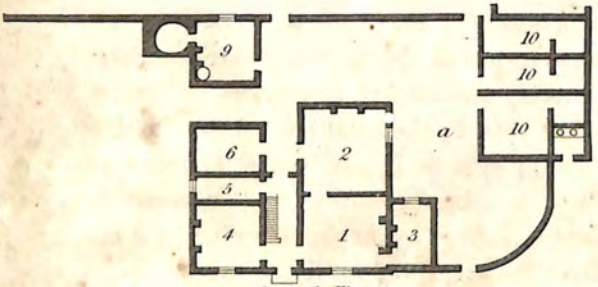
Pub.d by Longman & Co. July 1820.

Sidt Hall, sculp.

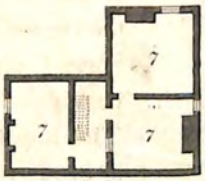
PLAN AND ELEVATION of HOUSE & OFFICES,

AT BLURTON ERECTED 1817.

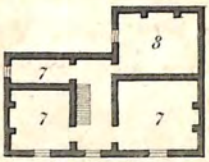




Ground Floor



Attic Story.



Chamber Story.

Scale of Feet.

5 10 20 30 40 50

Wm. Sorton, Trentham, del. Pub. by Longman & Co. July 1820. Sidl. Hall, sculp.

subsoil. Too much under the plough, and much exhausted by the late tenant. Davenport intends to occupy it as a dairy farm, for which it is well suited, and he is laying it down to grass. A great proportion of the wet land has been just drained, with the best effect, and in this he has been assisted to a very considerable extent by Lord Stafford. There is no water meadow. The house and buildings are brick, and tiled, and being lately finished, are in complete repair. A plan of them will be found in Plate No. 24.

COCKNAGE. Mr. John Juckes, from Shropshire, lately entered. A great proportion of this farm is of a deep fertile loam, of an excellent quality, the best on the estate; part of it consists of wet clay; a small proportion in grass. Much exhausted by the late tenant. A vast deal has been done within the last twelve months in draining, ditching, and new fencing, with the material assistance of the landlord, and with the best effect. There are about TEN ACRES of water-meadow. The house and buildings are brick, and tiled, and having been just repaired in part, and rebuilt in part, are in complete order.

COCKNAGE-GREEN. Mr. William Ford. This farm is of an inferior quality to the last farm, completely run out, and lying in a state of the most disgraceful neglect. It has been entirely drained and new-modelled, during the course of last year, by the landlord. A year back a horse could hardly step on it. It is now as sound as possible There is a small quantity of water-meadow. The house and buildings are brick, and tiled, and are in good repair.

The lanes through these farms were until last year impassable. A new road has been made, lifted out of the hollow. The old lanes are made arable, and a

person who saw these farms two years ago would not believe them to be the same land.

Township of LIGHTWOOD. — COBSHURST. Mr. John Proctor. This farm is composed of a cold, heavy, wet soil. The cultivation has been much neglected. Underground draining has just been commenced by this tenant. Owing to the very rough state of the farm, he has been considerably aided by the landlord. The house is good, but the buildings are half-timbered and indifferent. A brick manufactory is attached to this farm.

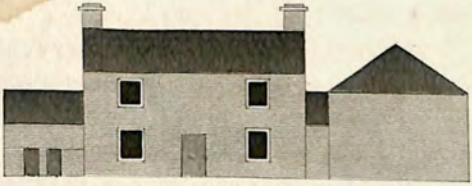
ROUGH-CLOSE. Mr. George Ferneyhough. Soil cold and wet. Much exhausted by the late tenants. Underground draining begun to with vigour, aided in the same manner as in the last case. The house and buildings are brick, and tiled, and just finished: a plan of them is given in Plate No. 25.

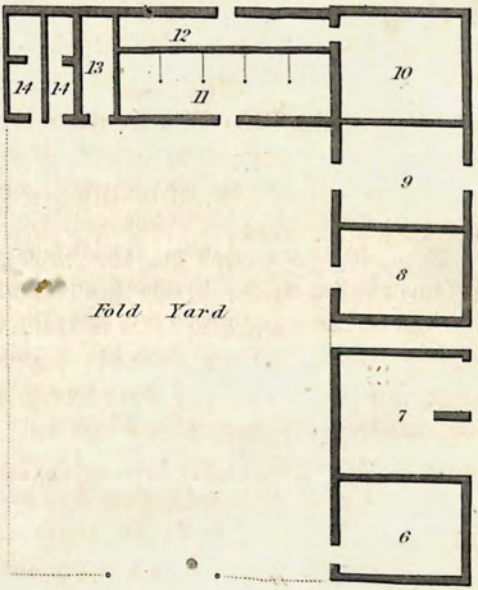
This part of the estate is divided into a great number of small occupations; the land and gardens were destroyed by the water which rose from the adjoining highlands. Lord Stafford executed a great catch-water drain from six to eight feet deep, on Elkington's system, which effectually drained the whole district occupied by these poor people.

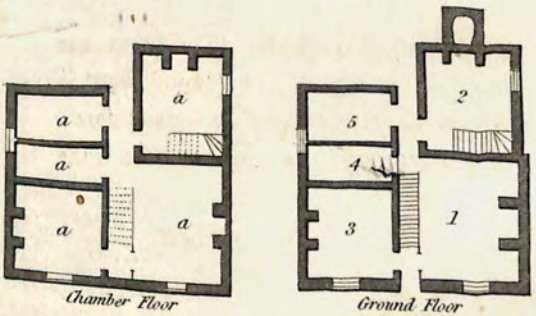
Township of NORMACOTT. — NORMACOTT-GRANGE. Mr. John Jackson, from the north of the county. Heavy, cold, wet soil; a proper proportion in pasture. Draining to a great extent has been executed on this farm with the best effect. The house is good; the buildings indifferent.

DITTO. Mr. T. Rogers. Inclining to a heavy wet soil; a great proportion in grass. The arable land is in very good condition, chiefly occupied as a dairy farm. A great extent of underground draining has been done

PLAN AND ELEVATION
OF THE HOUSE AND OFFICES
OF ROUGH CLOSE
Erected 1819.





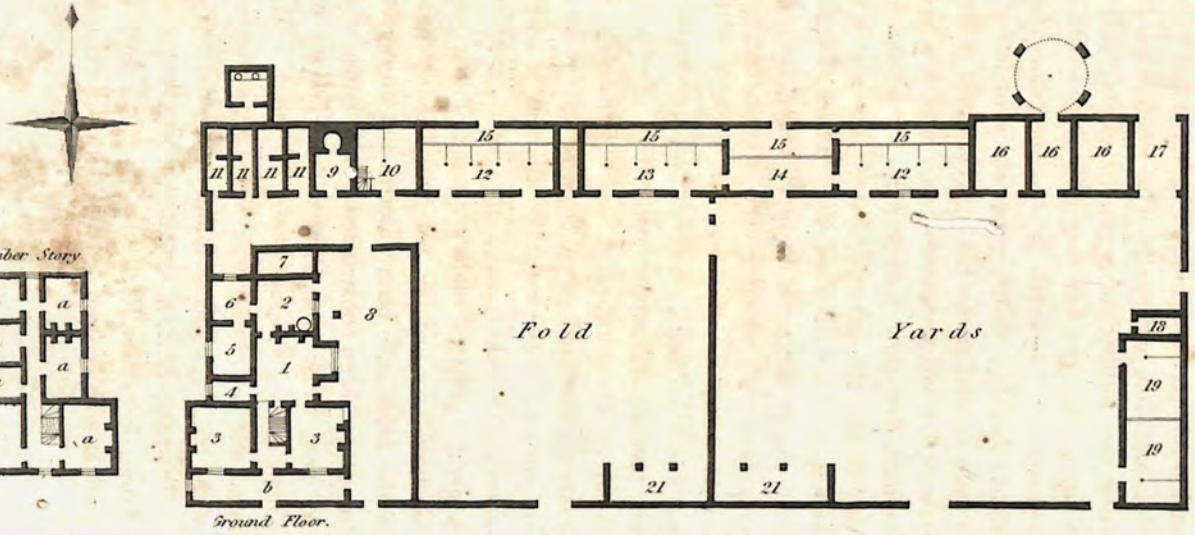


Wm Sorton Trentham del. Pub. by Longman & Co. July, 1820. Sidt Hall Sculp.

Appendix page 77.

PLAN AND ELEVATION OF FARM HOUSE AND OFFICES,

AT STALLINGTON GRANGE ERECTED IN 1811-3.



on this farm, from six to eight feet deep; the quantity of water obtained very great. There is a good proportion of water-meadow. The house and buildings are brick, and tiled, and good. This tenant is one of the most active and industrious upon the estate. The draining on these two farms was very difficult to execute, in consequence of the depth it was necessary to cut the drains: besides, it being necessary in many instances to bore according to Elkington's system; this was an expence beyond a tenant's reach and was done by the landlord, but they paid a per centage on the outlay. Almost all the other drains on the estate consist of shallow work, well filled up. These drains continue to discharge the same body of water they did at the commencement, which is very large indeed.

Stallington-Grange. Mr. Richard Fallows, from near Cheadle. Soil cold and wet, much exhausted by the last tenant. A proper proportion of this farm is in pasture. The cultivation in an improving state. In enlarging the fields several years ago, proper attention was not paid to the nature of the soil or situation. To remedy this defect some have been again subdivided. A great extent of underground draining and ditching has been executed last year with the best effect. Some of the fields have been watered, but no regular meadow has as yet been constructed. The house and buildings are new, brick and tiled, and in good repair. The tenant has an excellent stock of young cattle upon the farm, and is a most attentive and active farmer. A plan of the buildings will be found in Plate No. 26.

Township of Barlaston. — Parkfields. Mr. Ralph Aston, from near Eccleshall. Strong deep soil; occupied as a dairy farm; in good cultivation. It is farmed

according to the most improved system of husbandry. Many improvements have been lately made by the tenant. The house and buildings are brick, and tiled, and in complete repair.

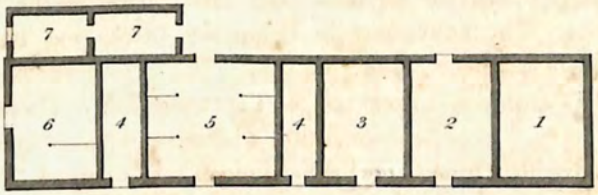
Township of TITTENSOR.—TITTENSOR. Mr. Thomas Stanley. This farm consists of a turnip and barley soil of an excellent quality. It has been much over-cropped. The lease has just been purchased. Much draining is required. The house and buildings are brick, and tiled, and have been lately repaired by the tenant, Lord Stafford furnishing the materials. The stock of sheep not good.

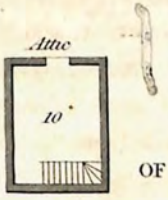
NEWHOUSE. Mr. William Dutton. The soil is inferior to the last. Small dairy. In tolerable cultivation. There is much draining required on this farm, and not much executed. The house and buildings brick and tile, and just finished. A plan of them is given in Plate No. 27.

HILLTOP. Mr. William Kendrick. The same soil as the last, partly occupied as a dairy, and partly as an arable farm. The cultivation good; a small portion of meadow land. The house and buildings in a tolerable state of repair.

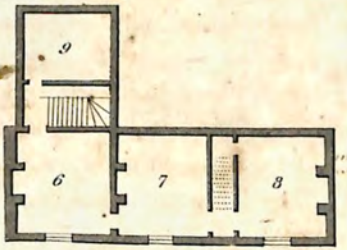
Township of DARLASTON.—BERRYBANK. Mr. John Powner. Soil of a good dry quality. A great proportion in grass. The arable land in a fair state of cultivation and condition. House and buildings not good.

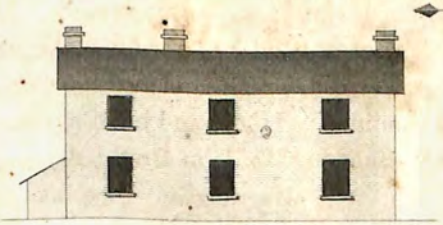
MICKLOW-HOUSE. Mr. John Brett. A heavy strong wheat and bean soil. The tenant, since his entry, has made many great and permanent improvements, in draining, ditching, filling up, and laying dry old marle pits. He has done much justice to the land, and farms it in a husbandlike manner, and is bringing it fast into the highest condition. House half-timbered, lately repaired, the buildings brick, and tiled, lately erected.

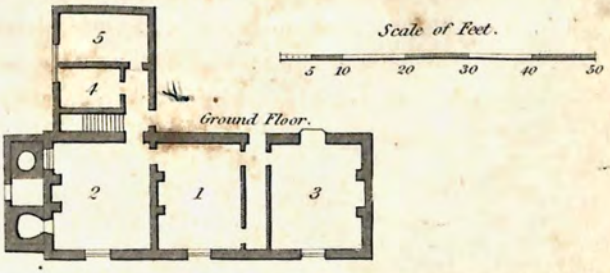




PLAN AND ELEVATION
OF A FARM HOUSE AND OFFICES
AT NEWHOUSE ERECTED 1819.







Hooksgreen. Oulton. Mr. Richard Tildesley. The soil is weak and poor along the hills. The lowlands are more fertile. The tenant improves the lands, keeping a small dairy. A small portion of water meadow. The house and buildings brick, and tiled, are in excellent repair.

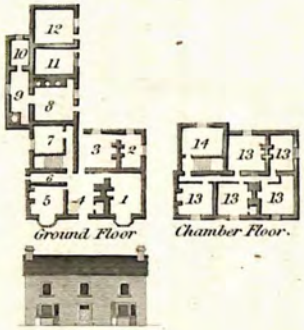
The farm called the Hill, in the occupation of Mr. John Scott, the lessee of the Roebuck Inn, in Newcastle, is situated near that town. The tenant understands the management of his land well. He has introduced of his own accord the practice of ploughing with two horses. The farm requires much underground draining, an improvement which has been done to the rest of this estate. A considerable quantity of excellent water-meadow has been lately formed on this estate by straightening the Newcastle brook or the Lyne, and by using its waters for the purpose of irrigation.

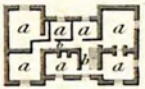
Wallgrange, near Leek. Mr. Vernon Royle. The soil is of an inferior description, and in a rough state. There is too great a proportion under the plough. The water-meadows are extensive, but ill formed, and subject to floods. They are now undergoing considerable improvement, the tenant being assisted by the landlord. The house and buildings are old, and are of stone, and slated; in a sufficient state of repair. This tenant also of his own accord adopted the two-horse plough.

Hill Chorlton. Mr. William Spearman. Consists of soil of a light dry quality, but the lands are so detached from each other, that it never can be occupied with advantage.

SHERIFFHALES. This parish extends as well into Shropshire as into Staffordshire.

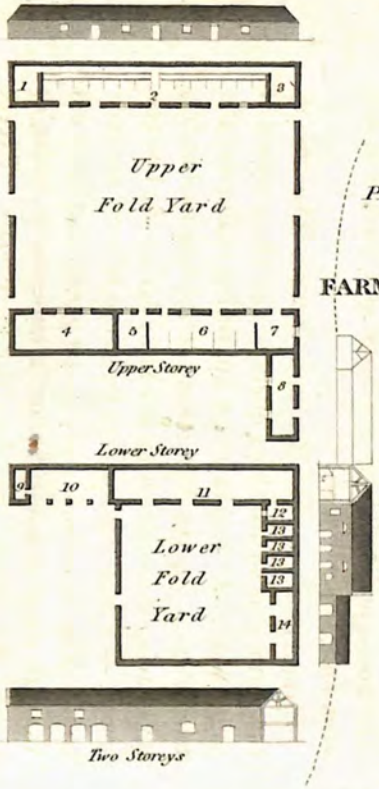
THE REDHILL. Mr. Thomas Shuker. Consists chiefly of a wet heavy strong soil with a retentive bottom. It formerly composed the outlying portions of all the leasehold holdings in this township. The fields were smaller and worse shaped than usual. The whole of the old fences were stocked up, and the land divided into fields of a rectangular shape This has been done with great judgment by the late John Bishton, Esq. Lord Stafford's former agent. The land, under the old system of management as may be conceived, was totally exhausted. Where the tenant happened to be more industrious than usual, he gave his farm a coating of marle. Lucky, however, has it been for the land which was in the hands of the less industrious husbandman, by which it has escaped the admixture of this additional quantity of retentive matter. Any person who has any doubt as to the bad effects of this substance as a manure, at least on land of this nature, is recommended to examine with attention the state of this farm. Every field points out with precision the land which was so used, from that which has escaped this treatment. The tenant has expended a large capital on this farm, and no man, but one of the most unbending industry and perseverance, could have struggled through the difficulties he has had to contend with. Just as he expected to reap the fruits of his exertions, the price of agricultural produce fell, and he must have sunk under the pressure, had it not been for Lord Stafford's generosity. To aid him in his future exertions, besides what was otherwise done for him, an allowance of lime was





PLAN AND ELEVATION OF A PROPOSED

DWELLING HOUSE.



PLAN AND ELEVATION

of a

FARM HOUSE AND OFFICES,

AT BURLAUGHTON

Erected 1818.

Scale of Feet.

5 10 20 30 40 50 100 150 200

made to him for three years, of which his farm stood much in need. The young quicks suffered much for want of protection until of late years. They were unfit to be fences, from which the tenant has materially suffered. The house and buildings are brick and tiled, and are new, and in good repair.

SHERIFFHALES. Mr. Benjamin York. The soil of this farm is of an excellent quality, with the addition of some moorland. It is in a very improving condition; the tenant following the best course of modern husbandry, and having done much to his farm during the last two years: — a great proportion of water meadow is annexed to it. The Moorlands have had a great main ditch cut through them at Lord Stafford's expence, in order to permit the tenants to under-drain their lands. Except York, none have taken advantage of this, their lands being still in lease.

SHERIFFHALES MANOR. Mrs. Corser and Mr. John Corser. An extended and detached farm, partly consisting of a cold heavy soil, and partly of a very excellent turnip and barley soil. It is in a bad state of cultivation and condition.—There are still in the village of Sheriffhales several leasehold tenants, whose lands are dispersed up and down the parish, though in a less degree than they were formerly. These farms are all cultivated in a very inferior manner, no improvement is executed, nor can any be expected on them, until the expiration of the respective terms makes it possible to adopt a totally new arrangement of the lands.

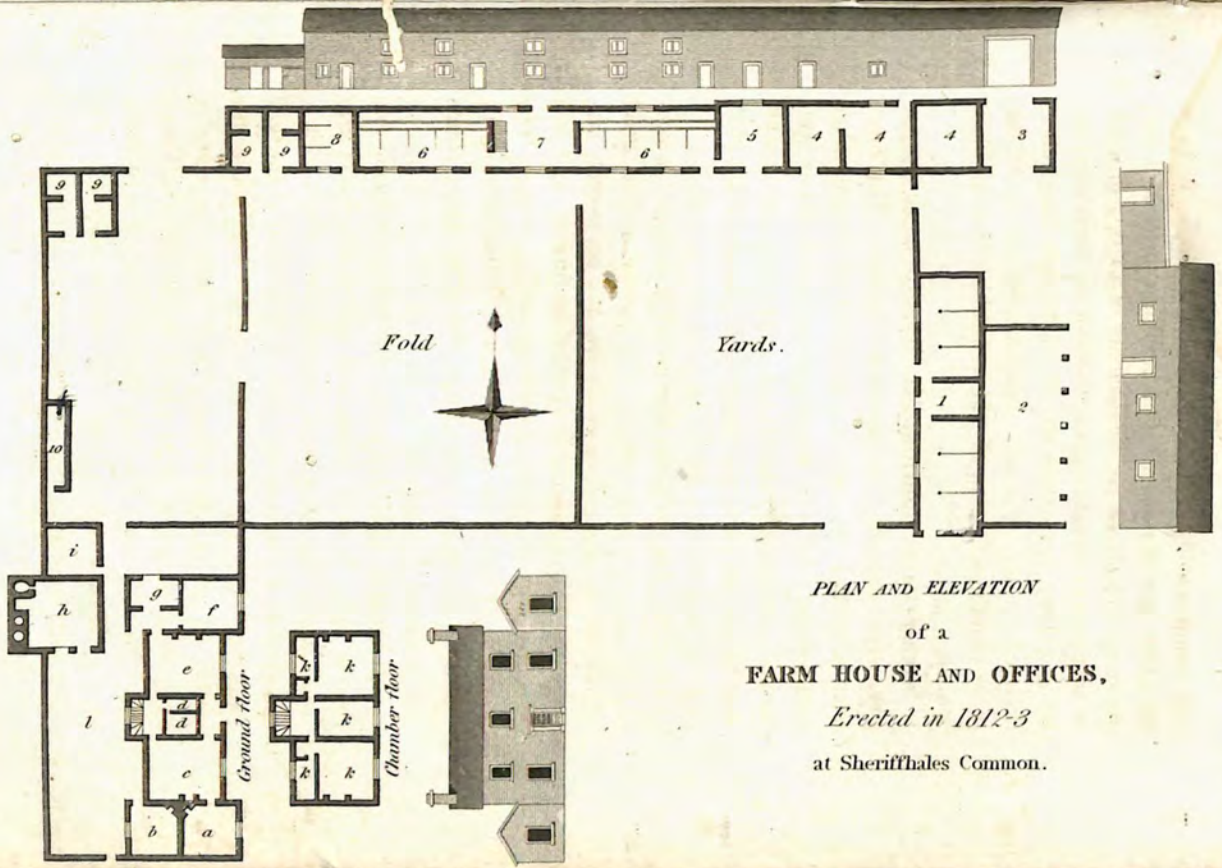
BURLAUGHTON. Mr. John Bellis. Principally a turnip and barley soil, has been severely cropped, and much run out by the last tenant. There is a good proportion of water-meadow, of which a considerable part has been

just completed by the landlord. The house is in a very bad state of repair. The buildings (brick and tile) are new, and placed on the declivity of a rising ground, so that part of them consist of two stories, the cow-tyings being below, the stables above. The thrashing mill is driven by water. Its scite decided the position of the other buildings, a plan of which will be found in Plate No. 28.

Sheriffhales Common. Mr. Richard Finney. Light, dry, weak soil, suited for turnip and barley. This farm was heretofore the outlying portions of several other occupations. It is in an improving state, being well farmed, and carefully attended to. The house and buildings brick, and tiled, and lately finished, of which a plan is given in Plate No. 29.

Hilton. Mr. William Pickin. The soil of this farm is various, and is extremely well farmed and in good condition, a good stock of sheep, and cattle well managed. The tenant is a spirited improver, and has executed a great extent of under-ground draining. The house and offices half timbered, and in tolerable repair, but not sufficiently large for the size of the farm, which has been lately enlarged.

Heathill. Mr. J. Lowe. Consists of a turnip and barley soil. It is in lease, and one of the few of this class which has been well farmed, and which is in a good state of cultivation. There is a small quantity of water-meadow attached to this farm. The house and buildings are in good repair. The rest of this township consists of the farms of Mr. John Smith, Mrs. E. Tooth, and Mrs. Ward. The two former farms are in lease, their soil various, and their cultivation indifferent. The buildings belonging to these lands are, with Lowe's, placed in the village of Heathill, and are not in good repair.



PLAN AND ELEVATION

of a

FARM HOUSE AND OFFICES,

Erected in 1812-3

at Sheriffhales Common.

Jn.° Smith, Lilleshall, del.

Pub by Longman & C.° July 1820.

Sid.° Hall, sculp.

The Wood. Mr. J. Bould. The soil of this farm is of a wet retentive nature, and a subsoil of the same quality. It requires much underground draining, and deeper ploughing, the want of which starves the crops which are sown on it. Much too large a proportion of it besides was kept under the plough. The house and buildings have been lately repaired.

Littlehales. Mr. Joseph Cotton. This farm is partly in the parish of Lilleshall, and partly in that of Sheriffhales. The soil is various and was much overploughed. The present tenant, who is a most industrious hard-working man, from near Trentham, is bringing it fast into order. The fields have been all new laid out and enclosed, and done with much judgment. It has been under-drained at a great expence, and Cotton is ploughing much deeper, and thereby essentially improves his land. The house and buildings are brick, and tiled, new, and in excellent order.

Parish of Lilleshall. Brockton Leasowes. The *Lilleshall Company.* Mr. John Barnet under-tenant. The farm in general consists of an excellent turnip and barley soil. A large proportion of it is in cultivation, but under an excellent system of management; the tenant in his practice being equal to the best corn farmer in the island. This farm has been thoroughly drained, the old fences stocked up, new ones made, and the fields brought into good shape and form. There has been much money expended on it by the company. The house and buildings are brick, and tiled, new, and in complete order. They were erected by the tenant. The materials for an addition to the house being allowed by the proprietor.

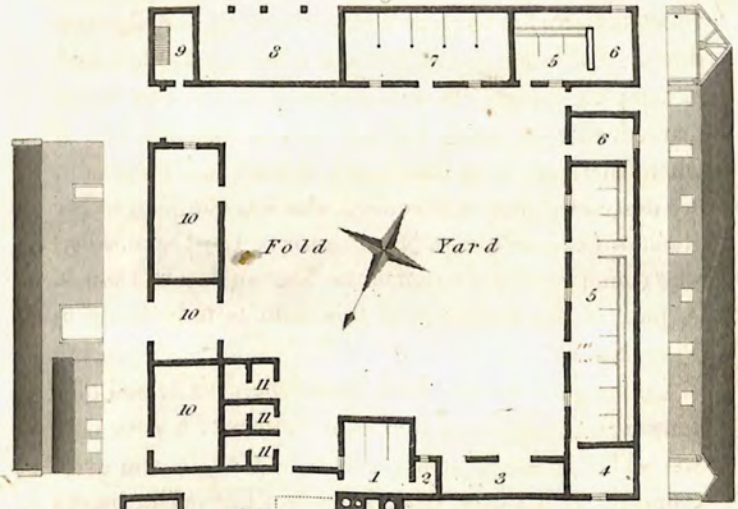
Lilleshall Hill Farm. Mr. William Penson. The

soil of the greater part of this farm is of superior quality, the remainder being heavy strong land; this last had been much neglected and exhausted by the old lease-tenants being situated in a distant part of the township without any roads leading to it. This defect is now remedied by means of excellent roads being made through it, enabling the tenant to drive muck and lime at all seasons, which he has done to a great extent. Within the last two years he has executed FOURTEEN THOUSAND yards of draining, EIGHT THOUSAND yards of ditching, and FOUR HUNDRED AND EIGHTY yards of new fencing,—hedge and ditch. The house and buildings are brick, and tiled, and in complete repair. Barn half timbered. It may be remarked, that the family to which Penson belongs, and of whom there are several both at Lilleshall and Trentham, are descended from a Fleming, who was Surgeon to Sir Richard Leveson's ship, (an ancestor of Lord Stafford's,) who commanded a division of the English fleet in 1588-9. A plan of the buildings of this farm is to be found in Plate No. 30.

LILLESHALL FARM. Mrs. Ann Jones. The soil of a considerable portion of this farm consists of a weak cold wet soil. There is much under the plough, and over-cropped. It has been lately in lease. The tenant hardly did any thing to it during the endurance of her term, Since that period she has begun to drain with considerable industry. The house and buildings are brick, and tiled, in good order, but rather too small.

LILLESHALL GRANGE. Mr. Edward West, from near Leek. The soil of this farm is various, inclining generally to wet;—a good proportion of it is in pasture. The arable land has been much over-cropped and exhausted by the old lease-tenants. The present tenant has under-drained to a considerable extent; the leading main ditch

PLAN AND ELEVATION
OF A FARM HOUSE & OFFICES ERECTED
at Lilleshall-hill 1818.



Chamber Story.

Ground Floor.

Scale of Feet.

5 10 20 30 40 50 100

Jnº. Smith, Lilleshall, del. Pub. by Longman & Cº. July. 1820. Sidº. Hall, sculp.

having been cut by the landlord. There is, however, much still to do. Many useless hedges have been taken up, and an old waste brought into cultivation. There is an excellent water-meadow attached to this farm. The house is old, but has been thoroughly repaired. It has been built out of the Abbey. The buildings are in hand. The thrashing-machine is to be driven by the stream which irrigates the meadows.

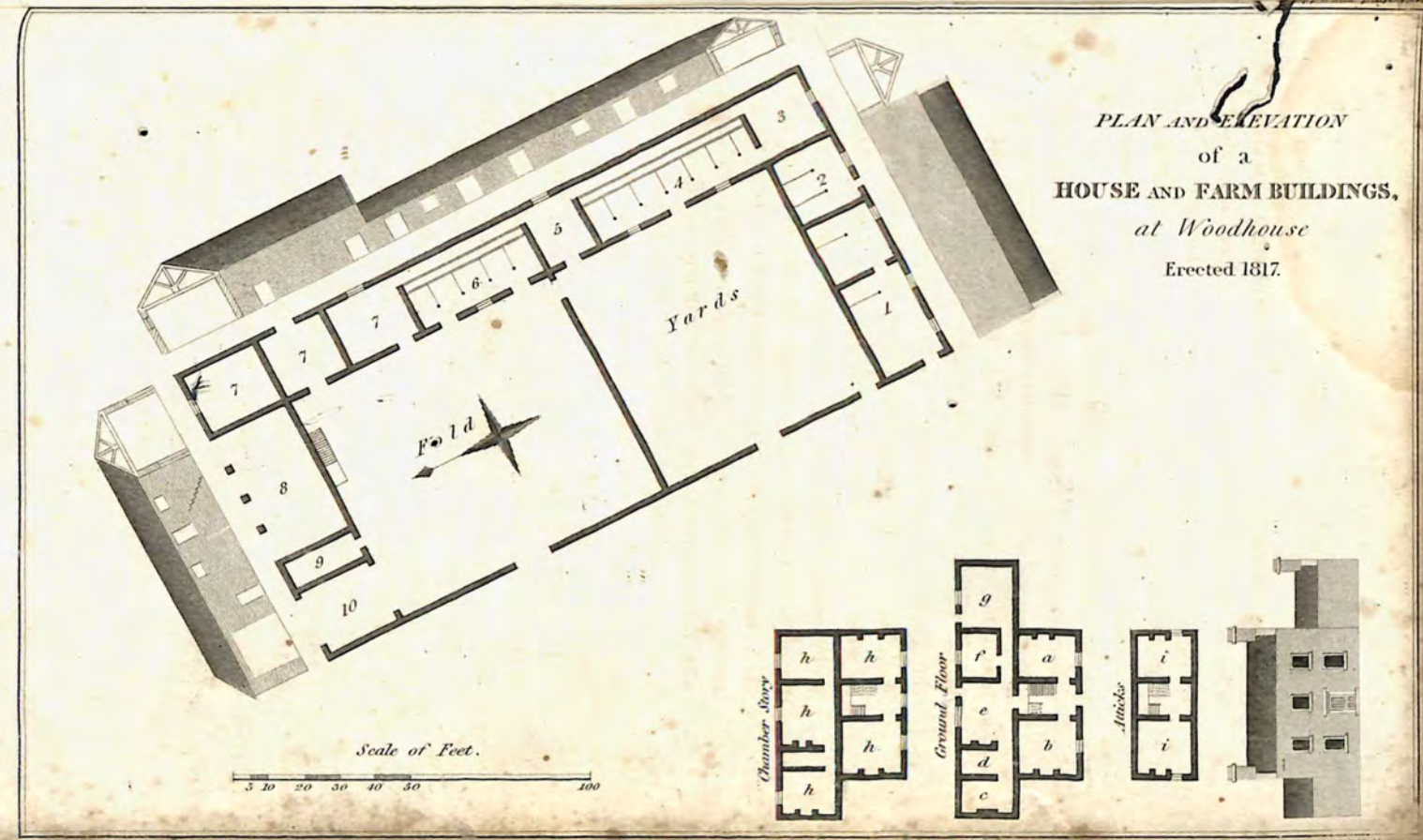
THE ABBEY FARM. Mr. Edward Wilde, from near Trentham. The soil of this farm is of a better quality than the last, but more exhausted by the lease-tenant. Upon this farm there has been much done in draining, stocking old fences, and converting old lanes into arable land. There is a small water-meadow, and the tenant has lately turned the water over more land; much has been done by the present tenant in under-ground draining, and he is getting it gradually into better order: he had an allowance of lime for two years on condition of his laying on an equal quantity at his own expence. The house is half-timbered, and not convenient. The buildings are brick, and tiled, and new.

Upon this farm is situated the ruins of the Abbey of Lilleshall, of the order of Saint Augustine, founded about the year 1145, in the wood of Lilleshall. It was dedicated to the Virgin; and was granted, 31 Hen. VIII. to James Leveson. The ruins are still extensive, and extremely beautiful. It formerly suffered much from the parish churches of Lilleshall and Sheriffhales, with several farm houses, having been built out of it. It was occupied as a post by the Cavaliers, during the period of the grand rebellion, and was fiercely attacked by the Parliamentarians. The foundations were traced out two years ago by the direction of Lord Stafford, and several

good specimens of tesselated pavement were obtained. The remains of an oven, which must have been used by the Cavaliers, was also discovered in the nave. The foundation is on peat; in order to consolidate which, a vast body of quick-lime appears to have been thrown in previous to the commencement of the building.

New Lodge Farm. Mr. J. T. Philips. Soil cold and heavy, upon a retentive bottom. There is too much under the plough, and it is too hard worked, being still in lease. The tenant lately entered, with the landlord's permission; he has dressed his fallows well, and has begun to plough with two horses abreast, as most of the others have on the heavy land. Much under-ground draining is required, and but little begun to. It will require much labour, expence, and skill, to manage this farm thoroughly. The house consists of brick, and is tiled; the buildings are tiled, and half-timbered, and have been lately repaired, the landlord furnishing the materials. It is proposed that he should go to Essex for a season, to see the best husbandry in that county.

The Woodhouse. Mr. John Hammond. The soil of this farm is various, though the heavy, strong, cold, wet sort prevails: it is much exposed. The tenant has lately, at a very considerable expence, new-modelled and re-enclosed the whole farm with hedge and ditch. It is very respectably farmed: it still stands in need of some under-ground draining. The house has been lately repaired, and is good, being brick, and tiled, as are the buildings which are just completed. This farm extends also into the parish of Sheriffhales. This, as well as New Lodge farm, has been much improved by an excellent road, made last year by Lord Stafford, through them both, from near the abbey to the Watling-


PLAN AND ELEVATION
of a
HOUSE AND FARM BUILDINGS,
at Woodhouse
Erected 1817.
Yards
Fold
1
2
3
4
5
6
7
7
7
8
9
10
Scale of Feet.
5 10 20 30 40 50 100
Chamber Story
h
h
h
h
h
Ground Floor
g
f
e
d
c
a
b
Attics
i
i
Jno. Smith, Lilleshall, del.
Pub. by Longman & Co. July 1820.
Sc. Hall

Street road. A plan of the buildings is to be found in Plate No. 31.

The Watling-Street Grange, Mr. Benjamin Dawes, one of the oldest tenant's families on the estate; having been in the same farm above one hundred and fifty years. He is an industrious and hard-working man, as are all his family. The soil is heavy and strong, but of an improvable quality: it is rather hard ploughed. The house and buildings are to have an immediate repair. On this farm were found, three years ago, near the Watling-Street, the remains of an old building, which were conjectured, without any sufficient authority, to have been a Roman bath. The remains of some rude pillars, which were found among the ruins, have been set up in the garden at Lilleshall.

Muxton-Hill Farm, including what was the Old Lodge Farm, Mr. Robert Dawes. The soil is various, inclining to be strong and wet. A large proportion is under the plough, but very well cultivated. Much under-ground draining has been done. The buildings are brick, and tiled, and just finished.

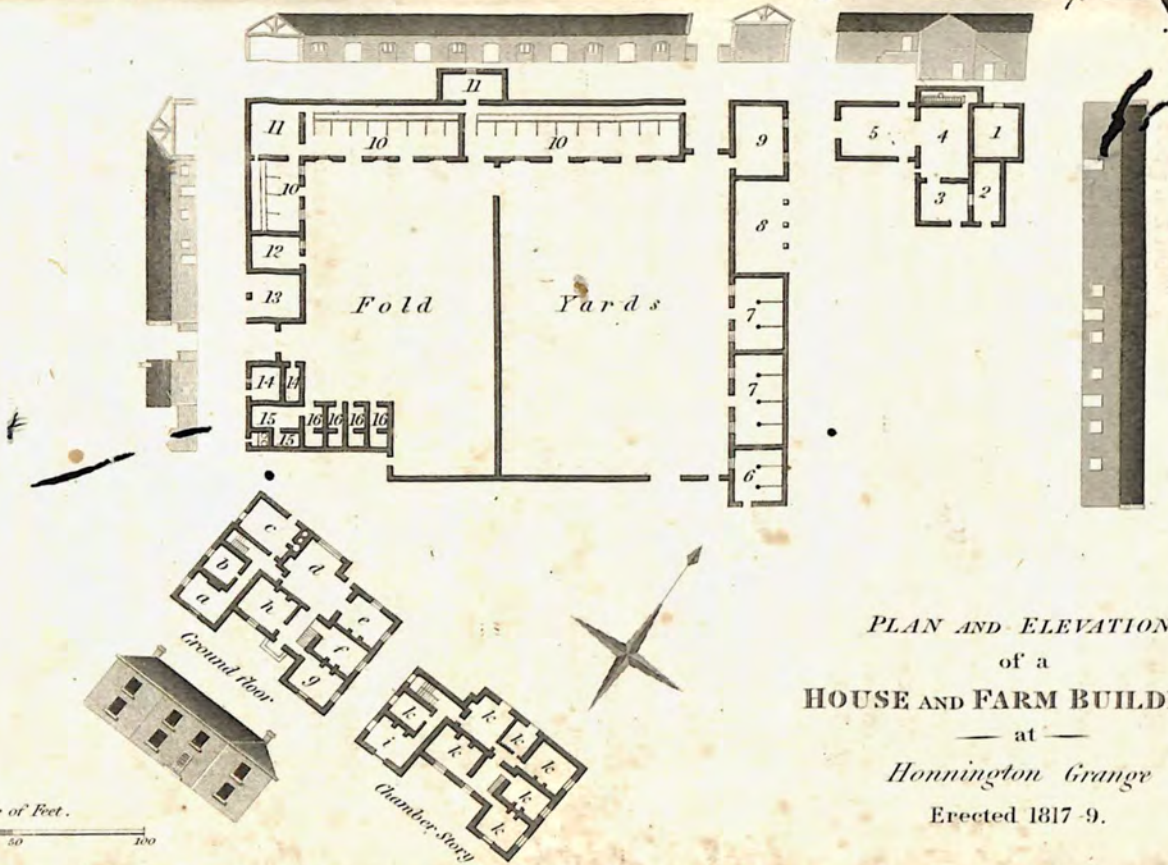
Upon this farm stood, in a most commanding situation, the Old Lodge, the former residence of the Leveson family, before they transferred their residence to Trentham. It had been gradually taken down, and that which was left having become a total ruin, it was pulled down last year. The park included the Old Manor or Abbey Farm, the New Lodge and Old Lodge Farms, with portions of some of the adjoining ones.

Donnington Wood and Lamy Lake Farms. Lilleshall Company, under the superintendance of Mr. J. Kite, consist of various soils. The whole is under the

plough, but in a state of excellent management and good condition. The whole of this farm has been new-modelled, re-enclosed completely, and drained by the tenants, at a very great expence. The shape of the enclosures have been laid out with great judgment. There is a little water-meadow. The house and buildings are brick, slated and tiled, and are new, extensive, and substantial.

Muxton. Mrs. Bridgen. The soil inclining to be strong and cold. The tenant has lately done much to bring this farm into a better state of cultivation, and has under-drained extensively: the house and buildings are old, half-timbered, but in tolerable repair.

Honnington Grange. Mr. John Duncalfe. The soil of this extensive farm is various, but, in general, of an excellent quality: there is too much, rather, under the plough. This farm has been acquired by the present tenant at various periods, as the leases of the adjoining lands expired, and, generally, in a very run out state. He has executed vast permanent improvements on the premises, by stocking up old, and forming new fences. He has laid his farm out in large, regular, and beautiful enclosures. No tenant on the estate has executed a larger portion of under-ground draining and ditching. He pursues the drill system of husbandry, and was the first person in the neighbourhood who introduced the plough with two horses abreast. By continued exertion, this farm will soon come into a high state of cultivation, but it will be much improved by a larger portion being laid down to grass, and will be sooner restored from its exhausted state. This he is doing. He has, at his own expence, formed thirty-six acres of water-meadow, in a very complete style. The water which irrigates the land drives the thrashing-machine. His house and buildings are slated and tiled,



PLAN AND ELEVATION
of a
HOUSE AND FARM BUILDINGS
— at —
Honnington Grange
Erected 1817-9.

John Smith, Littleshall, del. Pubd by Longman & Co. July, 1820. Sid. Hall sculp.

and being just finished, are in complete order and repair. A plan of them is given in Plate No. 32.

CHESWELL GRANGE. Mr. Thomas James. The soil of this farm is various, inclined to wet, and in part peat. The former tenant overcropped it, and run it out entirely. The present tenant, who has been three years in it, has entirely changed the appearance of the whole farm. It was divided into small irregular enclosures. It was drowned with water, and the ditches stagnated in every direction. The grass lands carried no herbage, and it was, in every way, a disgrace to the estate. Several impassable lanes wound through it in various directions. The enclosures are now all laid out in regular shapes and proper sizes:—the ditches are scoured, straightened, and run well:—the pastures have been top-dressed, with soil carried by means of iron rail-roads:—the lanes are thrown into the adjoining closes:—new and excellent roads are made;—and the only regret is, if regret can be felt for such a cause, that, in a few years, the old state of the farm will have so completely disappeared, that there will be no evidence of what it once was, or to show how much has been done in so short a time. The tenant has executed about THIRTY-FOUR THOUSAND yards of draining; stocked up about FIVE THOUSAND SIX HUNDRED yards of old, and planted about TWO THOUSAND FOUR HUNDRED yards of new quicks; besides making five acres of water-meadow, which he means to extend. The stream applied to this purpose is carried on such a level as to water a portion of the Brocton-Leasowe's farm, and to turn the thrashing-machine. The house and buildings have been lately repaired, and much added to. James has expended a large capital on this farm in a very short period, which,

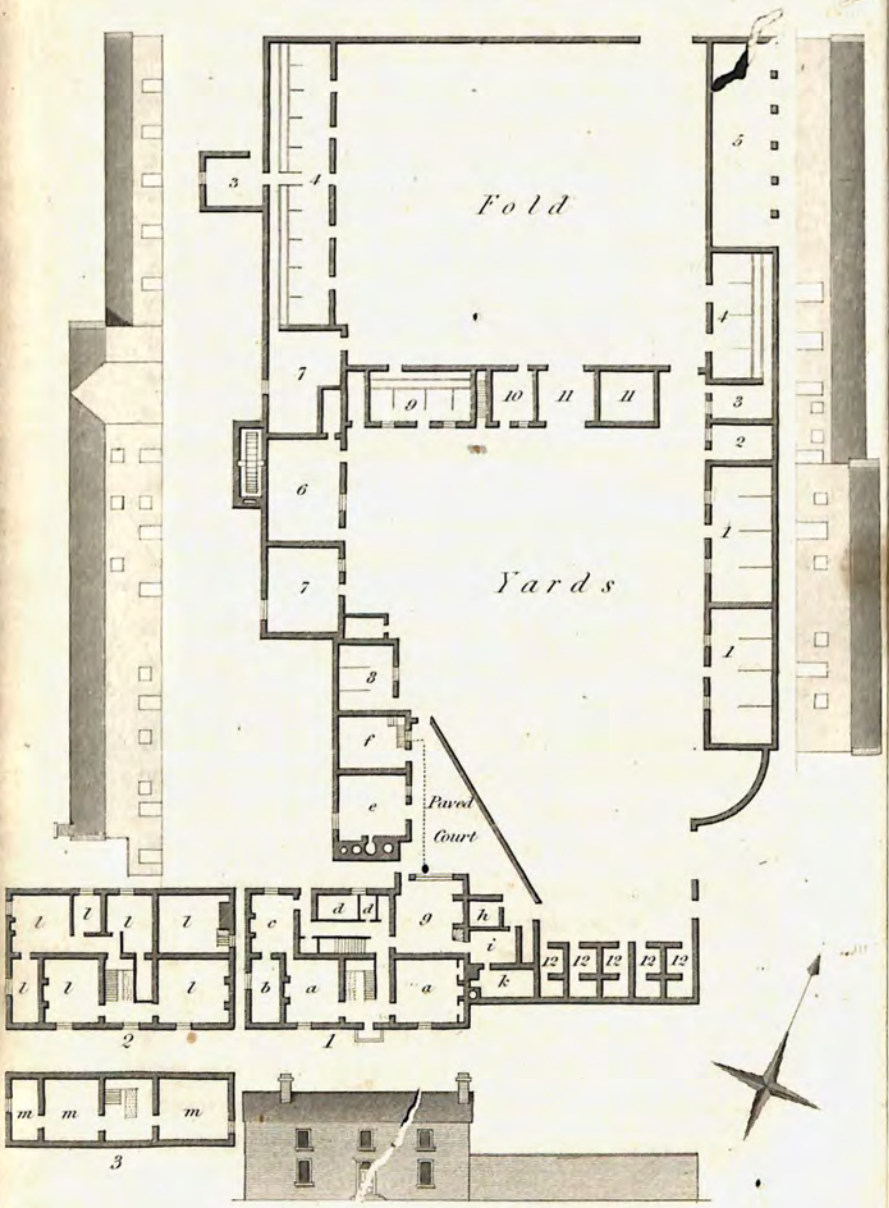
however, will speedily repay him, from the judicious manner it has been laid out.

THE HINCKS. Mr. Robert Pearce. The soil of this farm is various. The upland is of small extent, and not of the best quality: the greater part consists of moors, which were, until lately, drowned with water: they are now in a very improving state, and all in pasture. Lord Stafford has expended a considerable sum of money in making the main ditches of this farm, which also serve as the boundaries between this and the adjoining farms of Cheswell Grange, Honnington Grange, Donnington, Lubstree Park, and the Butterey. They serve also as the main leaders for the drainage of these respective farms; and, until they were executed, the land could not be improved, or any attempt made to lay these moorlands dry. They were, besides, in every way, beyond the power of a tenant to execute, and fell naturally within that class of work which a landlord ought to execute. When the present tenant entered to the farm, six years back, a tumbril could hardly approach the homestead; there are now excellent roads made completely through it. Mr. Pearce also has expended a very considerable capital in new-modelling, underdraining, and in the cultivation of the farm. It is principally occupied as a dairy farm. ELEVEN HUNDRED AND NINETY yards of main ditches have been cut, THREE THOUSAND TWO HUNDRED yards of fence ditches have been scoured and deepened, and TWENTY-FOUR THOUSAND yards of under-ground draining have been made and filled up by the tenant. The house and buildings are just finished.

DONNINGTON. Mr. Jos. Boycott. The soil of this farm is various, but in general of an excellent quality.

PLAN & ELEVATION OF HOUSE & FARM OFFICES,

AT DONNINGTON; ERECTED IN 1816.



Jn.e Smith, Lilleshall, del. Pub.d by Longman & Co. July, 1820. Sid.y Hall, scul.

It was in a variety of small leasehold occupations, and was divided and subdivided into the smallest fields imaginable: several lanes were required to communicate with them; much ground was consequently wasted:—the greater number of these fences have been moved, and the lanes got rid of. Underdraining, to a great extent, has been most judiciously done. A fair proportion of water-meadow has been added to the farm, and the whole is put under the best possible system of culture, and is now, perhaps, the most desirable on the estate. The house and buildings are brick, and tiled, and in excellent order. The thrashing-machine is driven by water. The mill-pools consist of some old crooked lanes, which had become useless for the occupation of the land, and too deep to be filled up; they were easily, and with advantage, converted to their present purpose. A plan of the buildings will be found in Plate No. 33.

Lubtree Park. Mr. Richard Higgins. The soil is various. The meadow and moorland of a very improvable quality; the upland excellent, and it is in a fair state of cultivation. It was, until lately, cut off from any intercourse with the rest of the estate, and it was by no means an easy matter to communicate with the different parts of the farm. It is now well provided with roads, and all the main lines of ditches have been done by the landlord. A considerable quantity of under-ground draining is still required, and some flood-gates, to pound back the water on the moorlands during the drought of summer. To see the practice of another country, the tenant of this farm spent near one year with a farmer in the most improved part of the Tweed-side system of farming. It was managed by his mother

during his minority. This farm requires much to be done to it; but if the tenant is active, industrious, and attentive to his business, no farm will so soon repay what is expended on it, but none will pay worse if not so managed.

Parish of KYNNERSLEY. THE BUTTEREY. Mr. John Masefield. The soil of this farm is various. The upland is excellent turnip and barley soil, and in a high state of cultivation: the moorland has, within the last three years, undergone a most rapid degree of improvement: about THIRTY-SEVEN THOUSAND yards of underground drains have been executed on this farm. The house and buildings are brick, and slated and tiled, new, and in good order. It was some time before the tenant was satisfied that the moorlands would turn out so good meadows as they have done, but experience has satisfied him of their value.

Before the tenants on these six last-mentioned farms could execute the very great improvements just mentioned, it was necessary for the landlord to complete the system of drainage described in the text; and this was dependent on those more extended works, which have been described. A more correct and accurate idea of the former and of the present condition of these lands will be had by referring to the two Plates No. 10. and 11.; the one showing the former state of the land, the other exhibiting its improved condition, and what has been done. As the intended arrangement is not yet quite completed, a more accurate idea of the alterations will be obtained, from a portion of the old system being exhibited in the midst of the modern improvements. To a person who understands and values the improvement of the country, there is no part of England, from the examination of which he will derive more sa-

tisfaction, than he will do from an inspection of the effect and progress of these works.

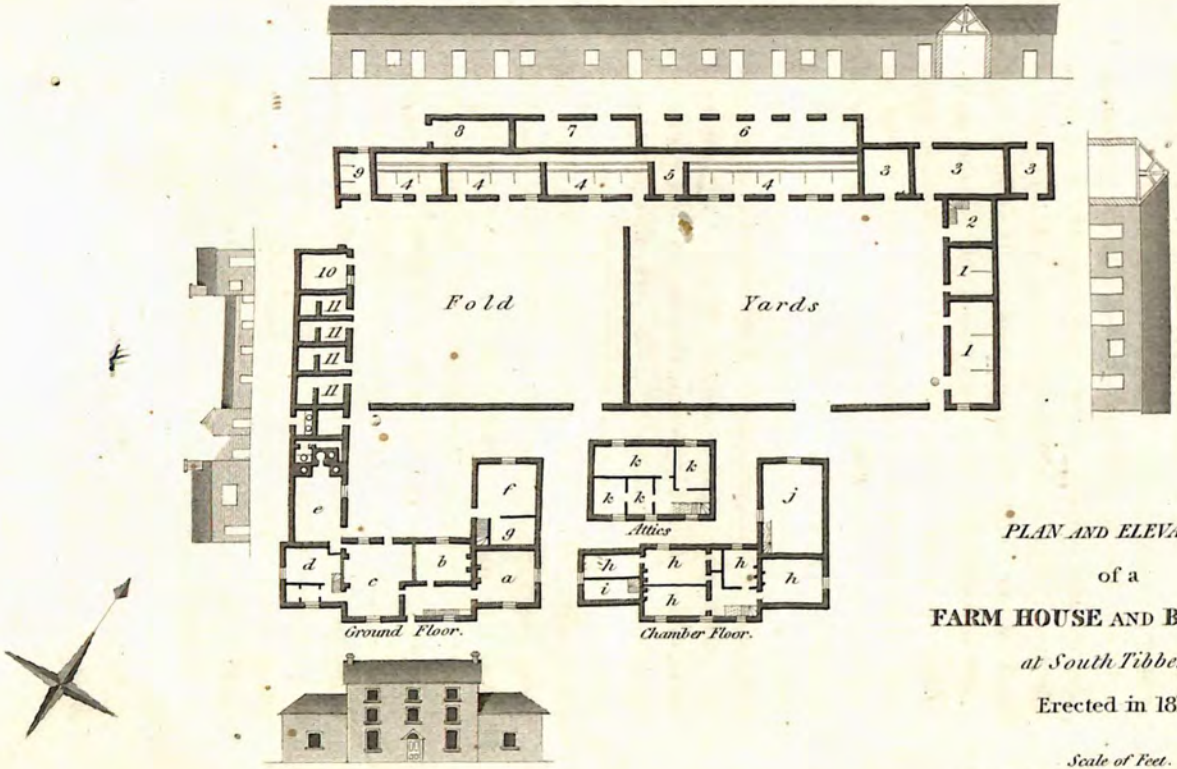
The Wall. Mr. Wm. Hughes. The soil of this farm consists of some good upland, but the greater part is moorland, which has been much improved in consequence of the general drainage of this district. It is occupied as a dairy farm. The house is not very good, and the buildings are partly old and partly new. This farm takes its name from a large mound of earth which has been thrown up round a considerable space, for the purposes of defence and fortification. It has been conjectured to have been constructed by the Romans, and to have been a station occupied by them.

The Township of Kynnersley. This township consists of Kynnersley-manor, Mr. William Palin; Kynnersley, Mrs. Hooper, the oldest family on the estate; and Sydney, Mr. John Pickin; with several smaller farms. The upland of this township is of a very superior quality of turnip and barley soil. The husbandry is in general very good. Palin and Pickin's farms are in a state of high cultivation: and the former especially has lately expended much money in the improvement of his land. Much has been done to the moor lands, which are coming into excellent condition. Hooper keeps a large dairy, in consequence of having a large proportion of moor land. Those which are attached to Sydney farm, are of a very inferior description; they require to be subdivided into smaller enclosures, which is to be done by the landlord. Palin has cut about six thousand yards of underground drains, and about fourteen thousand yards of ditches, scoured, straightened, and deepened. The houses and buildings, are all of brick, and tiled, and in excellent repair. Those of Palin have

been just repaired by him; the materials being furnished by the landlord. His thrashing-machine goes by steam, to which a flour mill has been attached. Palin's farm is partly on lease, but the present tenant holds it at a rack rent from his brother.

The Township of TIBBERTON. — TIBBERTON-SOUTH. Mr. William Taylor. The upland of this farm, is of the best quality of turnip and barley soil. The moor-land of the most improvable sort. It is in a high state of cultivation and condition, and all the operations on it are carried on in a very superior manner. The tenant has expended a very large capital in stocking old fences — in ditching and draining — and he has brought his moor land into a state of great comparative excellence. The number of yards of new ditching, executed by him, amount to THREE THOUSAND THREE HUNDRED; of old fences stocked SEVEN THOUSAND TWO HUNDRED; of under-ground drains cut and filled up TWENTY-EIGHT THOUSAND. He has also completed about FORTY acres of water-meadow, upon a part of his moor-land. His first experiments disappointed his hopes in every particular; and the land seemed to suffer, rather than to be benefited from the water being thrown over it. It has now been consolidated, and the meadow answers his expectations in every respect. On all the farms in this part of the estate, the extent and beauty of the turnip crops are not to be surpassed. The house and buildings are brick, slated and tiled, — lately built, but so insufficiently, as to show, already, symptoms of decay. The farming of this district is equal to any part of England. A plan of the buildings is given in Plate No. 34.

TIBBERTON EAST. Mr. Thomas Green. The soil of this farm resembles the last; and its style of cultivation



PLAN AND ELEVATION

of a

FARM HOUSE AND BUILDINGS,

at South Tibberton

Erected in 1811.

Jn.º Smith, Lilleshall, del. Pub. by Longman & C.º July, 1820. Sid.y Hall, sculp.

and management vies with it in every particular. The tenant has executed NINE HUNDRED yards of new fences, stocked TWO THOUSAND FIVE HUNDRED yards of old, and cut and filled SIXTY-TWO THOUSAND yards of under-ground drains. The house and buildings are brick, and tiled, and in excellent repair. The stock on this farm is good, and no one knows better how to turn it to the best advantage than Green does.

TIBBERTON. Mr. R. Jones. The soil of this farm is of the same nature as the two last, though not in the same state of high cultivation, but it is rapidly improving. The present young man has only lately succeeded to his father. The house and buildings are now in progress.

TIBBERTON NORTH. Mrs. Jane Cureton. The soil is the same as the last, but the cultivation less perfect. The buildings are in an imperfect state of repair. The greater part of the farm is still in lease.

The Township of CHERRINGTON.—CHERRINGTON MANOR. Mr. Thomas Adams. The soil of this large farm is various, but the upland is chiefly fitted for turnips and barley. It is in the highest condition, and in an excellent state of cultivation. The same may be said of the moor-land, to which Adams has done every justice. It has been already mentioned, that this tenant is one of the few who has availed himself of the advantages of his leasehold tenure. His improvements have been executed with great discernment. His fields have been most judiciously enlarged; he has stocked NINE THOUSAND SIX HUNDRED yards of new fences, and cut, and filled THIRTY-EIGHT THOUSAND yards of new under-ground drains. All the roads through his farm, both public and private, have been altered for the benefit of its occupation, and the accommodation of

the publick. The house is old but in good repair. The buildings consist of timber and are bad.

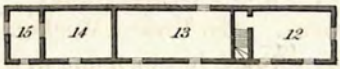
CHERRINGTON. Mr. Thomas Bourne. The soil is various, a large portion of it, being near the river, is in grass. A dairy is kept. The house and buildings are brick, and tiled, and in tolerable repair.

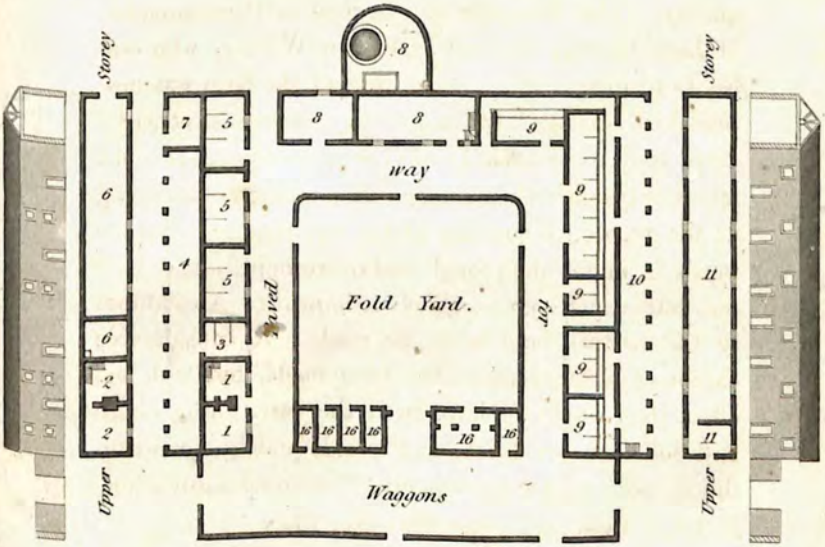
THE DAYHOUSE. Mr. Robert Walker. The soil of this farm is very various, but inclining to a strong heavy quality. This farm was at one time in the occupation of Lord Gower, but was let to Mr. Walker, who was his Lordship's bailiff. The whole of the farm was new modelled, arranged, and improved at a great expence by Lord Stafford, when in Lord Gower's holding. It is in a fair state of cultivation, under such a rotation of cropping as the respective qualities of the soil requires; but too much is under the plough and overcropped, and it is not, under such a course, likely to improve. An addition to the pasture land is to be made. A considerable extent of water-meadow has been made, but with less effect than ought to have been the case. The house and buildings are brick, and slated, and in good condition, but not very convenient. The thrashing-machine is driven by steam. See Plate No. 35.

The Township of CRUDGEINGTON.—CRUDGEINGTON LEASOWES. Mr. Richard Taylor. The soil of this farm consists partly of the best turnip and barley soil, and partly of a wet and stiff one fit for wheat and beans. The late leasehold tenants run it much out. The present tenant, who is one of the most industrious and intelligent farmers in the country, and an excellent judge of cattle, has done much to the permanent improvement of the farm, by under-draining to a great extent, and laying the fields more commodiously together

PLAN & ELEVATION OF A HOUSE AND FARM OFFICES,

at the *DAYHOUSE* Erected 1812-3.





Scale of Feet.

5 10 20 30 40 50 100 150 200

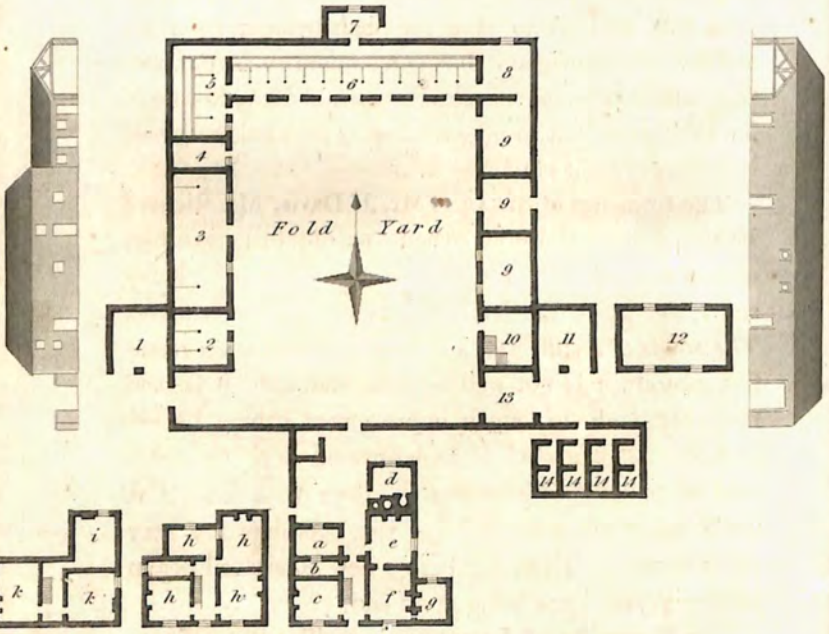
Jno Smith, Lilleshall, del. Pub. by Longman & Co. July, 1820. Sidt Hall, sculp.

PLAN AND ELEVATION

OF A **HOUSE AND FARM OFFICES** AT

Crudgeington Leasows

Erected 1817.



Scale of Feet.

5 10 20 30 40 50 100 150

He follows the most improved system of modern husbandry. The house and buildings are brick, and tiled, new built for the accommodation of the present tenant, and in complete repair and very commodious. See Plate No. 36.

CRUDGEINGTON. Mr. John Ryder. The soil of this farm is nearly the same as the last. The cultivation very respectable, much improved since the present tenant was enabled to take the management from his mother, who managed it during his minority. A proper proportion of water-meadow is attached to this farm. The house old, but in tolerable repair; the half-timbered buildings are not good.

The township of SLEAP. Mr. J. Davis, Mr. Richard Evans, and several other tenants occupy this township, and in consequence of a considerable portion of it being still under lease, the lands are held much intermixed. The soil is of a stiff, wet, and poor nature, with a retentive subsoil; it is not well farmed, and until it is held more commodiously much improvement cannot be expected. A great deal of underground draining and a road of communication through it are required. The lands being generally in lease the buildings are very much in ruin. There has been a new homestead begun at Evans's, his lease being at an end.

The Township of LONGDON upon TEARN. — LONG MILL — with a portion of Sleap. Messrs. Thomas Skitt, sen. and jun. The soil of these farms are various; that part which is in Sleap shows what industry, exertion, and an intelligent system of husbandry will do with the least manageable land. Mr. Skitt, sen. is one of the most excellent farmers in the county, and if all the heavy

land on the estate had fallen into such hands, there would have been no room for those observations which have been made as to the course pursued in regard to their culture. Long Mill is furnished with four pair of stones. It has just been rebuilt according to a very complete plan. The command of water from the Tearn is most abundant, and it is well situated to do a great deal of business. A plan of these buildings and of the mill will be found in Plate No. 37.

Longdon. The farms of Mrs. Bellis, Mr. William Belton, and Mrs. Juckes, compose this township. The first is composed of various soils, well farmed and in good condition. The house and buildings are brick, and tiled, and very good. The second consists of a strong wheat and bean soil, very much improved by the present tenant, who has only lately entered; had been much run out; a great extent of ditching and under-draining has been done by him. A small proportion of water-meadow is attached to it. The house is old, but has been lately repaired. The buildings are just finished. The third farm is of the same nature as the last; but it is in lease, and most completely exhausted, and farmed very badly. The house is good, but the buildings are indifferent.

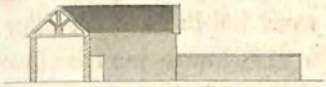
Tearn. Mr. Thomas Juckes. Consisting almost entirely of a turnip and barley soil. The enclosures have for many years been of a good size, but the present tenant receiving quick from the landlord has put them into a more regular shape. The cultivation is good, and the farm is well managed, and in condition, with an excellent stock. There is a proper proportion of water-meadow attached to the farm, but they are apt

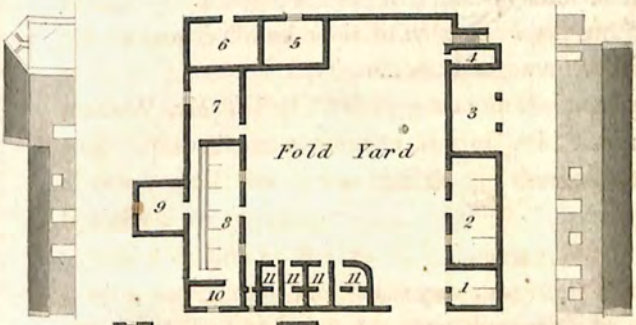
PLAN AND ELEVATION

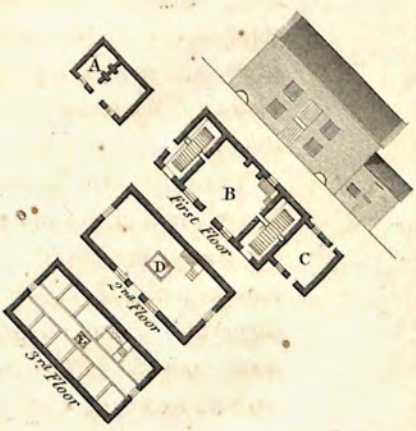
OF A FARM HOUSE, OFFICES AND MILLS,

Erected in 1816-20

at Longdon upon Tearn.







Scale of Feet.

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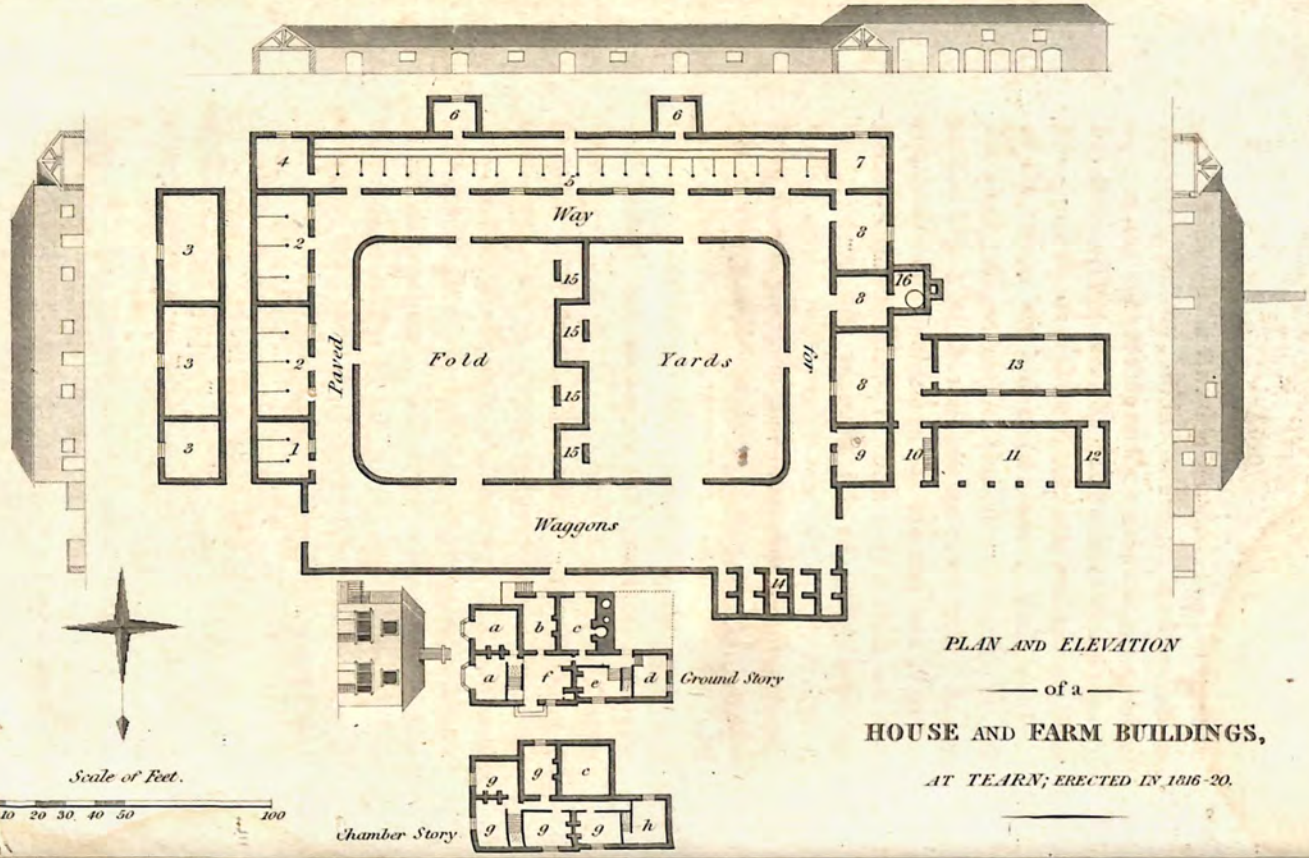


PLAN AND ELEVATION

of a

HOUSE AND FARM BUILDINGS,

AT TEARN; ERECTED IN 1816-20.

at times to be overflowed by the river Tearn.* The tenant has, from a conviction of the superior advantages of the system, adopted the plough with two horses upon his light land. The tenant has executed TWENTY THOUSAND yards of underground draining, EIGHT THOUSAND yards of ditching and FIVE THOUSAND yards of new fences. The house is very convenient and lately repaired. The buildings are just finished and are as complete and commodious as possible. The thrashing machine driven by steam. A plan of this excellent homestead will be found in Plate No. 38.

WAPPENSAL. William Briscoe, Esq. The upland excellent turnip and barley soil, in a high state of cultivation. The moor land completely drained and in the best order. These improvements were done at an early period by the very worthy and respectable gentleman who holds this lease. The house and buildings in good order.

LEEGOMEREY. William Shakeshaft, Esq. The soil of this farm is an excellent quality, fit for every sort of crop, and is in a good state of management and of cultivation, it has been greatly improved by Mr. Shakeshaft, who has expended much money on the farm, the house, and the buildings. With the exception of one small farm the residue of the township is let as accommodation land to the inhabitants of Wellington.

* This however will now be removed by banking out the Tearn. The acquisition of some detached meadows, which lay intermixed with this farm heretofore, stood in the way of this improvement. This acquisition will also admit of the more complete drainage of the wildmoors, by the construction of a syphon culvert under the river; thereby giving a great additional level to a portion of these moors.

KETLEY. This township is occupied by a numerous mining population, whose wretched huts have been erected from time to time on the wastes. Much attention has been of late paid, by Lord Stafford's direction, to the improvement of these habitations, and to the morals of the people, and with much success. The land is in small occupations, and it is intended by degrees to give land sufficient for the maintenance of a cow to the more respectable and industrious. It is a curious but an important fact, that there is not a person on Lord Stafford's estate, who possesses this advantage, who has claimed parish relief except one poor widow at Trentham, who has a large family and even the aid afforded her is lower than usual.

COLD HATTON, is occupied by Mr. S. Shakeshaft, Mr. Icke, and many smaller tenants, including a small upland farm occupied along with Sydney, composing this township. The soil of these farms is good, and capable of great improvement. The former is in a fair state of cultivation, the latter very severely cropped. The house of the former is old, but in tolerable repair; the buildings new and in good repair. The house and buildings of the latter are bad. This estate was granted to the Abbey of Lilleshall, by King John, for the purpose of enabling the monks to entertain the great number of Irish travellers, who proceeded to court in consequence of the conquest of that island.

WYRLEY. Mr. Henry Powner, with many smaller occupations whose soil is various, but inclined to wet. The cultivation very various; but not good, with a large extent of accommodation land.

PENN. Occupied in two farms by Mr. Richard Hollis, and Mr. Jordan. The soil of these farms is

various, the latter has some very good turnip and barley land. The cultivation might be better. They are both in a state of improvement. Hollis's house repaired, buildings new. The rest of these estates lie very detached, and is either occupied as accommodation land, or by the neighbouring proprietors near Wolverhampton.

STOWHEATH. Mr. John Jesson, and BRADES HALL, Mr. A. Malin, are both occupied as farms; the cultivation of the former has been much improved, while nothing can be more neglected than the latter.

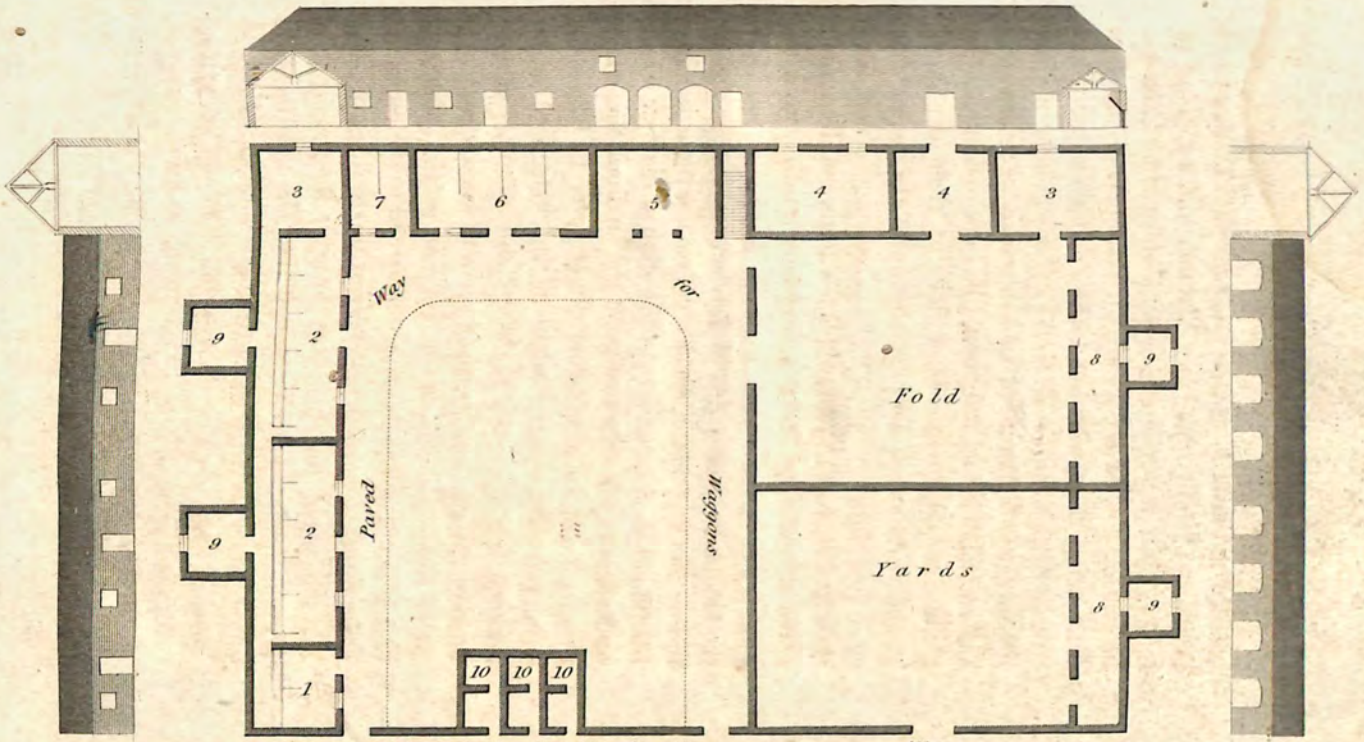
From this very general sketch of the improvements made on these selected farms, it will be seen how much has been done, and how much may be expected from so active, industrious and skilful a body of intelligent persons, and the nature of what has been done will demonstrate that it is not to one portion of his estates only that his Lordship has confined his exertions or limited his improvement. In neither country has Lord Stafford in what he has done, attempted to usurp the province of the farmer, by attending to the management and detail of any particular farm. To do this successfully or economically is beyond a landlord's reach. As an example to be followed by the tenants it is nearly useless, or perhaps it is much nearer the truth to say it has quite the contrary effect — as the expence at which a proprietor executes his improvements, frightens and indisposes every farmer from trying the experiment he recommends. Much capital has been lost to the country by these experimental farms, besides their having given, it is submitted, a wrong direction to the pursuits of the aristocracy of England. It is through the tenants alone, that the real, and permanent, and steady improve-

ment of the country can be undertaken. To this Lord Stafford's attention has been directed, and by giving an impulse and proper direction to the spirit of his tenantry, he has left the means of turning that spirit to the best account, to their own good sense and their individual interest, which must ever be the great regulator of every improvement agricultural or otherwise. The attention and capital of a landlord should be bestowed upon those permanent improvements which, in their execution, would withdraw too large a portion of the tenant's capital from the cultivation of his land, and which, from their extent, benefit more than one farm, and from their expence, will not make a sufficient return within the ordinary endurance of a tenant's occupation. This is the landlord's proper line of duty, and well suited to his station and position in society. Leaving the tenant and his capital in the unfettered cultivation of the soil. These duties will necessarily cast upon the landlord, that which the great landed proprietors ought never to let escape them, the direct and immediate management of all county matters, including the highways and turnpikes in their vicinity, in place of trusting them to the controul of a set of surveyors who are so ignorant and ill educated, and so unfit for their duty, as to add to the unlimited expence of the agricultural interest, in the shape of levies and tolls; with the chance of throwing the management of the public roads ultimately into the controul of a single board of paid commissioners, and thus have the effect in this respect, of reducing England to a level with the condition of the Continental States.

PLAN AND ELEVATION OF FARM BUILDINGS,

DEDICATED BY W. LEWIS, STEWARD AT TRENTHAM

TO JAMES LOCH ESQUIRE.



Jno. Smith Lilleshall del. *Pub by Longman & Co July 1820.* *Sidl. Hall. sculp.*

EXPLANATION OF PLATES.

PLATE I.

PLAN and ELEVATION of the *Inn* erected in 1809, at *Golspie* in the county of *Sutherland*, by the Marquess of STAFFORD.

REFERENCES.

First Floor.

a Servants hall.
b Closet.
c Dining-room, making occasionally two rooms.
d Lobby and stairs.
e Family parlour.
f Pantry.
g Kitchen.
h Family bed-room.

Chamber Floor.

i Barrack-room.
k Store-rooms.
l Bed-room.
m Best ditto.
n Bed closet.
o Lobby and stairs.
p Travellers room.
q Bed-room.
r Maid-servant's room.
s Bed-room.

PLATE II.

PLAN and ELEVATION of the *Inn* at *Port Gower*, in the parish of *Loth*, and county of *Sutherland*, erected in 1813, by the Marquess of STAFFORD.

REFERENCES.

a Parlour.
b Lobby and staircase.
c Travellers' room.
d Family room.
e Bar and pantry.
f Pantry.
g Kitchen.
h Servants' bed-room.
i Linen-room.
k Bed-rooms.

PLATE III.

PLAN and ELEVATION of an *Inn* erected in 1819, by the Marquess of STAFFORD, at *Clashmore* in the parish of *Dornoch*, and county of *Sutherland*.

REFERENCES.

a Tap-room.
b Pantry and stores.
c Kitchen.
d Family-parlour.
e Bed-closet.
f Lobby and stairs.
g Dining-room.
h Stable.
i Mail-coach stable.
k Men-servants' bed-room.
l Maid-servants' bed-room.
m Bed-room.
n Bed-closet.
o Bed-room.
p Hay-loft.
q Ditto.

PLATE V.

PLAN and ELEVATION of a *Curing Yard* and *Red-herring House*, erected in 1817 by the Marquess of STAFFORD, at *Helmsdale* in the parish of *Loth*, and county of *Sutherland*. In the occupation of the Messrs. Landles and Calder, of Berwick upon Tweed.

REFERENCES.

a Kitchen.
b Office.
c Stair and Lobby.
d Cellar and store-room.
e Salt-cellar.
f Lumber-room.
g Salmon boiling-house.
h Curing sheds.
i Red-herring house.
k Cooper's kitchen.
l Cooperage.
m Gutting shed.
n Wells.

The upper-floor consists of dining-room, parlours, and bed-rooms.

PLATE VI.

PLAN and ELEVATION of the *Surrey and Belgrave Arms Inn*, erected in 1819, by and at the expence of Mr. *George Alexander* of *Golspie*, at *Helmsdale* in the parish of *Loth*, and county of *Sutherland*.

REFERENCES.

Ground Floor.

a Tap-room.
b Lobby, stair, and pantry.
c Bed-closet.
d Bar and family room.
e Kitchen.
f Cellar.
g Lobby and stairs to bed-rooms.
h Travellers' room.

First Floor.

i Dining-room.
k Lobby and stair.
l Bed-closet.
m Bed-room.
n Bed-rooms and closets.

PLATE XII.

PLAN and ELEVATION of a *Farm House* and *Buildings*, erected in 1818, by the Marquess of STAFFORD, at *Cyderhall* in the parish of *Dornoch*, and county of *Sutherland*.
Tenant Mr. *George Rule*.

REFERENCES.

House. — Ground Floor.

a Parlour.
b Lobby and stair-case.
c Family room.
d Pantry.
e Kitchen.
f Yard (open.)
g Flower-garden.

Chamber Story.

h Bed-room.
i Bed-closet.
k Bed-room.
l Maid servants' room.
m Bed-room.

Offices.

a Cart-house.
b Stable.
c Tool-house.
d Thrashing-mill and straw-house.
e Horse-course.
f Cattle-sheds.
g Dairy.
h Calf-pen.
i Cow-byre.
k Feeding do.
l, *m*, *n* Bothy for ploughmen.
o o Pig-styes, and poultry above.

PLATE XIII.

PLAN and ELEVATION of *Farm Buildings*, erected for the Earl *Gower*, in 1811, by the Marquess of STAFFORD, at *Skelbo* in the parish of *Dornoch*, and county of *Sutherland*.
This farm consisting of 320 acres, is in the occupation of Lord *Gower*.

REFERENCES.

a Chaff-house.
b Corn-rooms.
c Thrashing-mill (with water-wheel) and straw-house.
d Cattle-sheds.
e Poultry houses, and piggery.
f Stables.
g Byres.
h Cart-shed.
i Cattle-shed.
k Dairy.
l Meal-house.
m Bothy for ploughmen.

PLATE XIV.

PLAN and ELEVATION of *Morvich Cottage*, erected in 1812, by the Marquess of STAFFORD *, in *Strathfleet*, in the parish of *Golspie*, and county of *Sutherland*. Occupied by *P. Sellar*, Esq.

REFERENCES.

a Porch.†
b Lobby.
c Family-room.
d China-closet.
e Water-closet.
f Store-room.
g Cellar.
h Stair.
i Dining-room.
k Family bed-room.
l Dressing-closet to bed-room.
m Writing office.
n Passages.
o Pantry.
p Kitchen, store-room above.
q Sitting-room.
r Best bed-room.
s Bed-rooms.
t Linen-room.
w Lobby and stair-case.

PLATE XV.

PLAN and ELEVATION of *Farm Buildings*, erected in 1812, by the Marquess of STAFFORD, at *Morvich*, in the parish of *Golspie*, and county of *Sutherland*.

Tenant. *P. Sellar*, Esq.

REFERENCES.

a Cart shed.
b Thrashing-mill, with water-wheel.
c Cow byre.
d Cattle-shed.
e Riding-horse stable.
f Stable.
g Bothy for ploughmen.

PLATE XVI.

PLAN and ELEVATION of *Farm Buildings*, erected in 1810, by the Marquess of STAFFORD, at *Dunrobin Mains*, in the parish of *Golspie*, and county of *Sutherland*.

Extent 500 acres. This farm is in the occupation of the proprietor.

REFERENCES.

a Carpenters' shop.
b Stable.
c Cow byre for servants' cows.
d Feeding byre.
e Cattle-sheds.
f Cart-sheds.
g Cow-byres for sixty cows.
h Slaughter-house.
i Calf-sheds.
k Piggery.
l Steaming-house, &c.
m Bothy, or ploughmen's room.
n Tool-house.
o Thrashing-mill (with water-wheel) and straw-house.

* This cottage was built for Lord Stafford's own occupation.

† The original entrance was at *f*, which then formed part of the lobby: *b*, *c*, was the housekeeper's room, and *k* and *l*, was one of the parlours.

PLATE XVII.

PLAN and ELEVATION of a *Farm House* and *Buildings*, erected in 1820, by the Marquess of STAFFORD, at *Inverbrora*, in the parish of *Clyne*, and county of *Sutherland*.

Extent 214 acres. Tenant Mr. *Thomas Hood*.

REFERENCES.

House.

a Parlour.
b Bed-room.
c Cellar.
d Pantry and stairs.
e Kitchen.
f Family-room.
g Lobby.
h Linen-press, and stairs.
i Garret bed-room.
k Lumber-room.
l Store-room.
m Maid-servants' garret.
n Garret bed-room.
o Lobby.

Buildings.

a Bothy.
b Cattle-shed.
c Thrashing-mill and straw-house.
d Horse course.
e Feeding byre.
f Stable.
g Calf-pen.
h Cow byre.
i Tool-house.
k Cart-shed.
l Piggery.

PLATE XVIII.

PLAN and ELEVATION of a *Distillery*, erected in 1819, by the Marquess of STAFFORD, at *Clynelish*, in the parish of *Clyne*, and county of *Sutherland*.

REFERENCES.

Ground Floor.

a Couch.
b Steep.
c Malt-barn.
d Still-pit.
e Bothy.
f Horse-course.
g Brew-house.
h Tun-room.
i Still-house.
k Condensers.
l Spirit-cellars.
m Spirit-casks.
n Shed for casks.
o Office.
p Court.
q Pig area.
r Pig styes.
s Breeding pig-styes.
t, *v*, *w*, Foreman's house.

First Floor.

a Granary.
b Kiln.
c Dried-corn loft.
d Boiler.
f Cooler.
g Still-house.
h Coopers' shop.
i Condensers.

PLATE XIX.

PLAN and ELEVATION of *Farm Buildings*, erected in 1819, by the Marquess of STAFFORD, at *Kintradwell* in the parish of *Clyne*, and county of *Sutherland*.

Tenant. Mr. *Thomas Houston*.

REFERENCES.

a Cart-shed, and Granary over.
b Thrashing-mill (with water-wheel) and straw-house.
c Tool-house.
d Shed for cattle and clipping sheep.
e Calf-pen.
f Cow-byre.
g Stable.
h, *i* Grieve's house.
k Bothy for ploughmen.
l Piggery.

PLATE XX.

PLAN and ELEVATION of *Farm Buildings*, erected in 1813, by the Marquess of STAFFORD, at *Loth Beg*, in the parish of *Loth*, and county of *Sutherland*.

Mr. *Ried* Tenant.

REFERENCES.

Cart-shed.
Meal and store house.
Servants bothy.
d Farm-horse stable.
e Hackney stable.
f Cow-byres.
g Thrashing-mill, water-wheel.
h Steaming-house.
i Pig-stye.
k Cattle shed.

PLATE XXI.

PLAN and ELEVATION of a *Farm House* and *Buildings*, erected in 1814, by the Marquess of STAFFORD, at *Knowlwall*, in the parish of *Trentham*, and county of *Stafford*.

Extent 104 acres. Tenant Mr. *Thomas Dutton*.

REFERENCES.

House.

1. Kitchen.
2. Brewhouse.
3. Parlour.
4. Sitting-room.
5. Pantry.
6. Milk-house.
7. Court-yard (open.)
a Bed-chambers.

Buildings.

8. Coals.
9. Hackney stable.
10. Turkey-house.
11. Pig-styes.
12. Waggon-horse stable.
13. Corn-bay.
14. Barn.
15. Straw-bay.
16. Cow-tyings,
17. Fodder-bins.
18. Calf-houses.
19. Waggon-shed, granary over, connected with barn.

PLATE XXII.

PLAN and ELEVATION of a *Farm House* and *Buildings* erected in 1813, by the Marquess of STAFFORD, at *Newstead* in the parish of *Trentham*, and county of *Stafford*. Extent 314 acres. Tenant Mr. *Richard Ford*.

REFERENCES.

House.

a House-place and kitchen.
b Master's room.
c Brewhouse.
d Dairy.
e Pantry.
f Parlour.
g Bed-rooms.
h Cheese-room.
i Atticks.

Buildings.

1. Shed for waggons, granary over.
2. Hackney-stable.
3. Waggon-horse stable.
4. Cattle-sheds.
5. Turnip-houses.
6. Fodder-house.
7. Straw bays.
8. Thrashing-mill, with water-wheel.
9. Corn-bay.
10. Tool-house.
11. Work-shop.
12. Bay for unthrashed corn.
13. Small granary.
14. Pig-styes.

PLATE XXIII.

PLAN and ELEVATION of a *Farm House* and *Buildings*, erected in 1811, by the Marquess of STAFFORD, at *Blurton Waste* *, in the parish of *Trentham*, and county of *Stafford*. Extent 204 acres. Tenant Mr. *John Townsend*.

REFERENCES.

House.

1. Kitchen.
2. Parlour, and cellar under.
3. Pantries.
4. Dairy.
5. Back kitchen.
6. Bed-chambers, and atticks.
7. Cheese-room.

Buildings.

8. Pig-styes.
9. Necessary.
10. Ash-house.
11. Cleaning-house.
12. Bake-house.
13. Tool-house.
14. Cow-houses and feeding bins.
15. Calf-house.
16. Turnip-houses.
17. Barn.
18. Drift-way.
19. Waggon-shed.
20. Hackney stable.
21. Waggon-horse do.

* Houses and Buildings on a similar plan were erected in 1811 at Hanchurch-hill, in the parish of Trentham, county of Stafford; extent 215 acres. Tenant Mr. N. Robison. In 1812-13, at the Butterey, in the parish of Edgemond, and county of Salop; extent 293 acres. Tenant Mr. John Masefield. — In 1810, at the Red-hill, in the parish of Sheriffhales, and county of Salop; extent 291 acres. Tenant Mr. Thomas Shuker. — And in 1811 at Littlehales, in the parishes of Sheriffhales and Lilleshall, and county of Salop; extent 266 acres. Tenant Mr. Joseph Cotton.

PLATE XXIV.

PLAN and ELEVATION of a *Farm House* and *Buildings*, erected in 1817, by the Marquess of STAFFORD, at *Blurton*, in the parish of *Trentham*, and county of *Stafford*.
Extent 251 acres. Tenant Mr. *Richard Davenport*.

REFERENCES.

House.

1. Kitchen and house place.
2. Back kitchen.
3. Sitting-room.
4. Parlour, cellar under.
5. Pantry.
6. Milk-house.
7. Bed-chambers and atticks.
8. Cheese-room.
9. Brewhouse and scullery.
10. Pig-styes.

a Court-yard (open.)

Offices.

11. Waggon-shed.
12. Tool-house, store-room over.
13. Thrashing-mill and corn bay.
14. Barn.
15. Straw-bays.
16. Tyings for 41 cattle.
17. Feeding bins.
18. Turnip-house.
19. Calf-houses, granary over.
20. Waggon-horse stable.
21. Hackney do. men-servants' bed-room over.

PLATE XXV.

PLAN and ELEVATION of a *Farm House* and *Buildings*, erected in 1819, by the Marquess of STAFFORD, at *Rough-Close*, in the parish of *Stone*, and county of *Stafford*.
Extent 60 acres. Tenant Mr. *George Ferneyhough*.

REFERENCES.

House.

1. Kitchen.
2. Back kitchen and brewhouse.
3. Parlour.
4. Pantry.
5. Milk-house.

a Bed-chambers.

Buildings.

6. Stable.
7. Waggon-shed.
8. Corn-bay.
9. Thrashing-floor.
10. Straw-bay.
11. Cow tyings.
12. Fodder-bin.
13. Tool-house.
14. Pig-styes.

PLATE XXVI.

PLAN and ELEVATION of a *Farm House* and *Buildings*, erected in 1811-13, by the Marquess of STAFFORD, at *Stallington Grange*, in the parish of *Stone*, and county of *Stafford*.

Extent 400 acres. Tenant Mr. *Richard Fallows*.

REFERENCES.

House.

1. Kitchen.
2. Back kitchen.
3. Parlours.
4. Pantry.
5. Dairy.
6. Scullery.
7. Coal-house.
8. Back-yard.

a Bed-chambers.
b Flower-garden.

Buildings.

9. Bake-house.
10. Hackney stable.
11. Pig-styes.
12. Tyings for twenty cows.
13. Do. for ten do. Granary over.
14. Calf-house.
15. Straw-bin and feeding-way.
16. Barn.
17. Lock-up house and drift-way.
18. Tool-house.
19. Stables.
20. Waggon-shed.
21. Open sheds for cattle.

PLATE XXVII.

PLAN and ELEVATION of a *Farm House* and *Buildings*, erected in 1819, by the Marquess of STAFFORD, at *Newhouse*, in the parish of *Stone*, and county of *Stafford*.

Extent 87 acres. Tenant Mr. *W. Dutton*.

REFERENCES.

House.

1. Kitchen.
2. Back-kitchen, bakehouse, and brewhouse.
3. Parlour, cellar under.
4. Pantry.
5. Milk-house.
6. 7. 8. Bed-rooms.
9. Cheese-room.
10. Men servants' bed-room.

Buildings.

1. Corn-bay.
2. Barn.
3. Straw-bay.
4. Fodder bins.
5. Tyings for 12 cows.
6. Stable.
7. Calf-houses.

PLATE XXVIII.

PLAN and ELEVATION of a *Farm House* and *Buildings*, erected in 1818, by the Marquess of STAFFORD, at *Burlaughton*, in the parish of *Sheriffhales*, and county of *Stafford*. Extent 392 acres. Tenant Mr. *John Bellis*.

REFERENCES.

House.

1. Family-room.
2. Kitchen.
3. Back kitchen.
4. Lobby.
5. Parlour.
6. Pantry.
7. Dairy.
8. Brewhouse.
9. Bakehouse.
10. Store-house.
11. Workshop.
12. Hackney-stable.
13. Bed-rooms.
14. Cheese-room.

Buildings—Upper Story.

1. Hay-bin.
2. Feeding shed.
3. Turnip-house.
4. Granary.
5. Turnips for cow-house.
6. Waggon-horse stable.
7. Hay-bin.
8. Sheep-house.

Lower Story.

9. Tool-house.
10. Waggon-shed.
11. Cow-house.
12. Calf-house.
13. Pig-styes.
14. Open shed for young cattle.
15. Thrashing-mill with water-wheel.

PLATE XXIX.

PLAN and ELEVATION of a *Farm House* and *Buildings*, erected in 1812-13, by the Marquess of STAFFORD, at *Sheriffhales-Common*, in the parish of *Sheriffhales*, and county of *Salop*.

Extent 334 acres. Tenant Mr. *Richard Finney*.

REFERENCES.

House.

a Bed-room.
b Men servants' bed-room.
c Parlour.
d Closets.
e Kitchen and house-place.
f Dairy.
g Pantry.
h Brewhouse.
i Coals.
k Bed-rooms.
l Kitchen court (open).

Buildings.

1. Stable.
2. Waggon-shed.
3. Lock-up house.
4. Barn.
5. Calf-house.
6. Cow-tyings.
7. Turnip-house and straw-bin.
8. Hackney stable.
9. Pig-styes.
10. Hen-house.

PLATE XXX.

PLAN and ELEVATION of a *Farm House* and *Buildings*, erected in 1818, by the Marquess of STAFFORD, at *Lilleshall-hill*, in the parish of *Lilleshall*, and county of *Salop*.

Extent 260 acres. Tenant Mr. *Wm. Penson*.

REFERENCES.

House.

a Family-room.
b Parlour.
c Kitchen.
d Brewhouse.
e Dairy.
f Pantry.
g Bed-chambers.
h Men-servants' do.

Buildings.

1. Hackney-stable.
2. Harness-room.
3. Open shed for cattle.
4. Calf-house.
5. Cow-tyings.
6. Turnips.
7. Waggon-horse stable.
8. Waggon-shed, granary over.
9. Tool-house, stair to granary.
10. Barns.
11. Pig-styes.

PLATE XXXI.

PLAN and ELEVATION of a *Farm House* and *Buildings*, erected in 1817, by the Marquess of STAFFORD, at *Woodhouse*, in the parishes of *Lilleshall* and *Sheriffhales*, and county of *Salop*.

Extent 322 acres. Tenant Mr. *John Hammond*.

REFERENCES.

House.

a Family-room.
b Parlour.
c, *d* Pantries.
e Kitchen.
f Dairy.
g Brewhouse and scullery.
h Bed-rooms.
i Attics.

Buildings.

1. Waggon-horse stable.
2. Hackney ditto.
3. Calf-house.
4. Cow-tyings.
5. Turnip-house.
6. Cow-tyings.
7. Barns.
8. Waggon-shed, granary over.
9. Tool-house.
10. Lock-up drift-way.

PLATE XXXII.

PLAN and ELEVATION of a *Farm House* and *Buildings*, erected in 1817-19, by the Marquess of STAFFORD, at *Honnington Grange*, in the parish of *Lilleshall*, and county of *Salop*.

Extent 496 acres. Tenant Mr. *John Duncalfe*.

REFERENCES.

House.

a Milk-house.
b Pantry.
c Brewhouse.
d Kitchen and house-place.
e Family-room.
f Store-room.
g Master's-room.
h Parlour.
i Cheese room.
k Bed-rooms.

Offices.

1. Flour-mill.
2. Chaff-house.
3. Winnowing-floor.
4. Thrashing machine, driven by water.
5. Corn-bay.
6. Hackney stable.
7. Waggon-horse do.
8. Waggon-house, granary over.
9. Straw bay.
10. Cow-tyings.
11. Turnip-houses.
12. Calf-house.
13. Cart-shed.
14. Blacksmith's shop.
15. Coals and tool-house.
16. Pig-styes.

PLATE XXXIII.

PLAN and ELEVATION of a *Farm House* and *Buildings*, erected in 1816, by the Marquess of STAFFORD, at *Donnington*, in the parish of *Lilleshall*, and county of *Salop*.

Extent 380 acres. Tenant Mr. *Joseph Boycett*.

REFERENCES.

House.

a Parlours.
b Cellar.
c Master's room.
d Pantries.
e Brewhouse.
f Dairy, cheese-room over.
g Kitchen.
h Coal-house.
i Court-yard.
k Scullery.
l Bed-rooms.
m Atticks.

Buildings.

1. Waggon-horse stables.
2. Calf-house.
3. Turnip-houses.
4. Cow-tyings.
5. Waggon-shed.
6. Thrashing machine.
7. Corn and straw-bays.
8. Hackney-stable.
9. Cow-tyings } Granary over,
10. Tool-house } which communi-
11. Lock-up do. } cates with the barn.
12. Pig-styes.

PLATE XXXIV.

PLAN and ELEVATION of a *Farm House* and *Buildings*, erected in 1811, by the Marquess of STAFFORD, at *South Tibberton*, in the parish of *Edgemond*, and county of *Salop*. Extent 511 acres. Tenant Mr. *Wm. Taylor*.

REFERENCES.

House.

a Best parlour.
b Common parlour.
c Kitchen.
d Pantry.
e Back kitchen and brewhouse.
f Scullery.
g Dairy.
h Bed-chambers.
i Maid-servants' bed-room.
j Cheese-room.
k Atticks.

Buildings.

1. Stables.
2. Harness-room.
3. Barn, straw, and corn-house.
4. Cattle tyings, and feeding-way.
5. Turnip-house.
6. Plough and harrow shed.
7. Work-shop.
8. Tool-house.
9. Hackney stable.
10. Blacksmith's shop.
11. Pig-styes.

NOTE. — *Nos.* 7, 8, *and* 9 *were added to give strength to the rest of the building.*

PLATE XXXV.

PLAN and ELEVATION of a *Farm House* and *Buildings*, erected in 1812-13, for the Earl *Gower*, by the Marquess of STAFFORD, at the *Day-house Farm*, in the parishes of *Edgemond* and *Bolas Magna*, and county of *Salop*. Extent 479 acres. Tenant Mr. *Robert Walker*.

REFERENCES.

House.

a Parlour.
b Family-room.
c Brewhouse.
d Kitchen.
e Pantry.
f Milk-house.
g Bed-rooms.
h Atticks.

Buildings.

1. Men-servants' day-rooms.
2. Sleeping do. above.
3. Hackney stable.
4. Shed for implements.
5. Waggon-horse stables.
6. Hay-loft.
7. Tool-house.
8. Barn and steam-engine.
9. Feeding and cow-tyings.
10. Turnip-house.
11. Great granary and pay-room. This room is used for the annual agricultural dinner given by Lord Stafford.
12. Small granary.
13. Corn-loft.
14 and 15. Straw-loft.
16. Pig-styes, hen-houses over.

PLATE XXXVI.

PLAN and ELEVATION of a *Farm House* and *Buildings*, erected in 1817, by the Marquess of STAFFORD, at *Crudgeington-Leasowes*, in the parish of *Ercall Magna*, in the county of *Salop*.

Extent 280 acres. Tenant Mr. *Richard Taylor*.

REFERENCES.

House.

a Dairy.
b Pantry.
c Parlour.
d Wash-house and brewhouse.
e Scullery and back kitchen.
f Kitchen and house place.
g Office.
h Bed-rooms.
i Cheese-room.
k Atticks.

Buildings.

1. Waggon-shed.
2. Hackney-stable.
3. Waggon-horse stable.
4. Calf-house.
5. Cow-house.
6. Feeding-house.
7. Turnip-house.
8. Straw-bay.
9. Barns.
10. Tool-house and granary stair.
11. Cart-shed.
12. Granary over 10 and 11, which communicates with the thrashing-floor.
13. A lock-up drift-way.

This plan has also been adopted on the following farms;

Tibberton, extent 205 acres. Tenant Mr. Thomas Jones.
Atwell, do. 214 do. do. Mr. John Corser.

PLATE XXXVII.

PLAN and ELEVATION of a *Farm House* and *Buildings*, and *Mills*, erected in 1816-20, by the Marquess of STAFFORD, at *Longdon* upon *Tearn*, in the peculiar of *Longdon* upon *Tearn*, and county of *Salop*.

Extent 60 acres. Tenant Mr. *Thomas Skitt*.

REFERENCES.

House.

a Parlour.
b Kitchen.
c Masters' room.
d Brewhouse.
e Dairy.
f Pantries.
g Bed-rooms.

Buildings.

1. Hackney-stable.
2. Waggon-horse do.
3. Waggon-shed, granary over.
4. Tool-house.
5. Corn-bay.
6. Barn.
7. Straw-bay.
8. Cow-tyings.
9. Turnip-house.
10. Calf-house.
11. Pig-styes.

Mills.

A Miller's house.
B Mill.
C Clover-seed do.
D Grinding-floor.
E Granary.

PLATE XXXVIII.

PLAN and ELEVATION of a *Farm House* and *Buildings*, erected in 1816-20, by the Marquess of STAFFORD, at *Tearn*, in the parish of *Ercall Magna*, and county of *Salop*. Extent 460 acres. Tenant Mr. *Thomas Juckes*.

REFERENCES.

House.

a Parlours.
b Family-room.
c Brewhouse (two stories.)
d Pantry.
e Milk-house.
f Kitchen.
g Bed-rooms.
h Men servants' bed-room.

Buildings.

1. Hackney-stable.
2. Waggon-horse do.
3. Loft over Nos. 1 and 2.
4. Calf-house.
5. Cow-tyings.
6. Turnip-houses.
7. Straw-bay.
8. Barn, machine driven by steam
9. Slaughter-house, granary over.
10. Lock-up drift-way, where carts can be loaded from the granary under cover.
11. Waggon-shed.
12. Tool-house.
13. Granary over No. 11.
14. Pig-stye.
15. Open shed for cattle.
16. Steam engine.

Trentham, 26th February, 1820.

DEAR SIR,

Along with this you will receive a Plan and Elevation of Farm Buildings *, which I have projected, and which I think worthy of your notice. They are meant as suitable for the occupation of a Farm of from 200 to 300 acres, considering from one to two-thirds in hay or pasture. They are upon a scale which no Landlord can object to in point of expence, are also commodious and at the same time very compact, there being no extra or superfluous building attached thereto.

Your obedient Servant,

(Signed) WILLIAM LEWIS.

To JAMES LOCH Esquire.

REFERENCES.

1. Cow-tyings for four.
2. Tyings for twenty cattle.
3. Straw-bays.
4. Barn and thrashing-floor.
5. Cart-shed and granary.
6. Waggon-stable for four horses. †
7. Hackney-stable for two horses.
8. Sheds for young cattle.
9. Turnip-houses.
10. Pig-styes.

* Plate, No. 39.

† Some farmers may say that *four* waggon horses are insufficient, and that *two* hacks are too many to be kept on such a farm; but, in my opinion every farmer ought to have a spare hack fit to take the side of a plough in spring time or autumn, and, by purchasing a horse to work along with the hack, three pair of ploughs can be put to work, which is quite sufficient for a farm of the extent alluded to. I am confining my ideas entirely to practical farmers, and not to those keeping hunters, or otherwise employing from four to six horses in one plough.

THE END.

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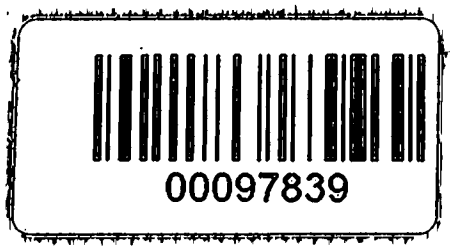
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